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SOLAR CELL DATA FROM THE RADIATION DAMAGE EXPERIMENT ON SATELLITE ATS-1

RAMOND C. WADDEL

MAY 1971

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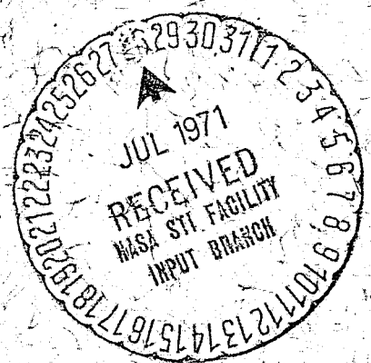

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Ramond C. Waddel
Electronics Division

May 1971

GODDARD SPACE FLIGHT CENTER
Greenbelt, Maryland

SOLAR CELL DATA FROM THE RADIATION DAMAGE EXPERIMENT ON SATELLITE ATS-1

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NASA - Goddard Space Flight Center

ABSTRACT

Results from the ATS-1 Solar Cell Radiation Damage Experiment are presented in tabular and graphic forms. The numerical data gives the coordinates of eight points on the voltage-current characteristic of each of 29 solar cells during 418 days in synchronous orbit. The cells were of various types, bearing shields of several kinds and thicknesses. Data is presented in both uncorrected and in corrected forms. In the latter the irrelevant effects of varying illumination and temperature are removed.

The apparatus, orbit, data processing, and conclusions are also briefly described.

SOLAR CELL DATA FROM THE RADIATION DAMAGE EXPERIMENT ON SATELLITE ATS-1

PURPOSE AND CONTENT

The purpose of this report is to put on record selected data obtained from the ATS-1 Solar Cell Radiation Damage Experiment. The information is presented in the form of tables and graphs. It shows the changes in the voltage-current characteristics of 29 solar cells of various kinds, shielded in various ways, over a period of 416 days, in synchronous orbit. Some information on the apparatus, data treatment, and conclusions is also included.

There have been several publications about this experiment. These publications (1, 2, 3, 4, 5) give some data but are principally devoted to discussions and conclusions. In view of the facts that this experiment remains, to my knowledge, unique in the extent and type of information obtained, that some conclusions were of an unexpected nature, and that I am retiring from this type of endeavor, this data is being offered in case others wish to attempt further analysis.

THE SOLAR CELL RADIATION DAMAGE EXPERIMENT

Apparatus

The radiation damage experiment on board spacecraft ATS-1 involved 30 solar cells of various kinds, bearing various shields. The panel carrying the solar cells was 4 x 8 inches in size. It was made of one-eighth inch magnesium for temperature uniformity. The panel is shown in Figure 1. Temperature was measured at the center point only.

The panel also carried a device called a solar aspect sensor. It measured the angle between the plane of the panel and a line to the sun at the instant during spin when the panel most nearly faced the sun. It also provided a pulse at this instant which signalled the circuitry to take a solar cell reading.

The above pulse also controlled the operation of 80 micro-miniature relays (2 in parallel) so as to select the various solar cells and to load each with one of a series of eight load resistors. These resistors had nominal values of 3, 4.5, 6, 8, 10, 15, 25 and 2000 ohms. The voltages developed across each of the cells, as loaded successively by each of these resistors, was evaluated, at the moment of maximum illumination, by an 8 bit analog-to-digital converter (capacity: 255 units for 765 millivolts (mv) or 3 mv per unit). These digital numbers were stored in an on board 2176 bit bi-axial core magnetic memory.

Also entered were the apparatus responses to calibrating signals of zero and 480.0 mv, a solar cell temperature reading from a thermistor, the angle of illumination as read by the solar aspect sensor, cell identification, and time of observation. The temperature resolution was about 1°C. The aspect angle resolution was about 1 degree. The solar cell voltage resolution was 3 mv.

A block diagram of the spacecraft apparatus is shown in Figure 2. The solar cell panel and the memory weighed 5 pounds and consumed 5 watts.

When the spacecraft received a certain radio ground command (which was ordinarily sent several times a day) a data taking sequence was initiated in the experiment apparatus. The voltage developed across each solar cell, as loaded successively by the eight load resistors, was evaluated at the instant of maximum illumination and entered into the memory, together with auxiliary information mentioned previously. At the end of a complete data-taking sequence, which required about 2 minutes, the relay sequencing stopped and the contents of the memory were telemetered to ground stations in an orderly manner. This repetitive transmission continued until interrupted by a ground command to take new data. The ground station recorded the digital PFM signals on magnetic tape.

The taking of sufficient data for constructing the full voltage-current characteristic of each solar cell was an innovation in space solar cell damage experimentation. The technique revealed significant changes in the characteristic that would not have been evident if the usual method of monitoring short-circuit current, only, had been employed.

Calibration

Certain calibrations were made before launch. The solar cell damage panel was exposed to the sun (at about 90 mw/cm^2) through a 6 foot collimator to exclude sky light. The response of each cell, as loaded by each of the 8 resistors was then X-Y recorded versus angle of incidence. The stray resistances in the solar cell leads, as well as the true values of the load resistors, were carefully measured. The analog-to-digital converter was adjusted for zero, linearity, and slope. The voltage-temperature characteristic of the thermistor was measured.

THE SOLAR CELLS

The 30 solar cells were all, nominally, 1 cm by 2 cm in size and made of silicon. The nature of the cells and their shields is indicated in Table I. As shown, the cells vary in base resistivity, base dopant, and shield thickness and

material. Under "Material" the Corning Glass Co. code numbers are given. Type 7940 is an artificial fused silica. Types 7740 and 0211 are glasses. The material "SAP" is clear artificial sapphire.

Cell thicknesses were about 14 mils (thousandths of an inch) except for cells 1 and 2, which were about 8 mils. Further, these two cells were "blue-sensitive," were slightly smaller in area than the others, and were aluminum doped. Their sapphire shields were attached to the cells without the usual adhesive, being held at the edges by a type of solder. There were, also, no anti-reflecting films or filters.

As indicated in Table I, cells 15 and 16 had 1 mil integral shields of 7740 glass. This material was applied as a powder and then melted at about 900° C. There was no adhesive or anti-reflective coating.

The 7940 and 0211 type shields were attached with Dow-Corning type XR-63-488 clear, solventless silicone elastomer. Their filters had a blue rejection characteristic with a 400 milli-micron cutoff to minimize adhesive darkening. The outside of the shields had a magnesium flouride anti-reflection coating.

The electrodes of these cells were of the usual silver-titanium composition. They were not solder-dipped. The front electrode was "comb" shaped. The front contact was made by soldering a ribbon of expanded silver mesh (about 2 mils thick) over the length of the bar contact.

The cell and shield assemblies involved in this experiment were probably done with more care than is ordinarily exercised in constructing main power supply panels, with thousands of cells. However, post-launch examination of spare experiment panels showed that the cell shields were frequently slightly mis-aligned, leaving small areas of cells exposed. Such mis-alignment is not uncommon in the assembly of solar panels for spacecraft. This defect probably was not present for cells 1, 2, 15, and 16, with their special shields.

The effect of radiation damage to small unshielded areas on the operation of solar cells as a whole is now considered significant. On recent solar power panels special efforts are being made to minimize or cover such areas. This is being done, at least partly, as a result of some peculiar results discovered in this experiment.

THE ORBIT

The Application's Technology Satellite 1 (ATS-1) carrying this experiment was launched from Cape Kennedy, Florida, on December 7, 1966, at 2 hours,

12 minutes, GMT. After reaching an altitude of 100 miles, it was put into an elliptical transfer orbit of 100 miles perigee and 22,240 miles apogee. After one and one-half such ellipses (about 0.63 days) the spacecraft was injected into a synchronous equatorial orbit. Its final station was over the Pacific equator at 157 degrees west longitude. The spacecraft was spin-stabilized, with a north-south axis, at about 100 revolutions per minute.

The first experiment observation was taken 0.0643 days after lift-off during the first outward pass after lift-off. A B versus L plot, together with radiation belt maps, indicates the probability of only slight damage (even to unshielded cells) up to this point. However, it appears that the next two passes through the belts, before attaining synchronous orbit, were highly damaging to the unshielded cells. These predictions are substantiated by the results. The observations taken at 0.0643 days after lift-off may be taken, with little error, as characteristic of undamaged solar cells at air mass zero.

TIMES AND CONDITIONS OF OBSERVATION

Of the great volume of experiment data that was received and processed, this report presents only a selected amount. The day-by-day records were useful in disclosing step-wise cell damage in unshielded cells. These steps could generally be correlated with solar proton flares, detected on the same spacecraft by other means. Cells shielded by 1 mil of glass showed only a possible correlation. Cells with thicker shields showed no correlation. Long term trends in the degradation of short-circuit current, maximum power, and open-circuit voltage are adequately shown by the less frequent observations cited here.

Table II shows the times after launch, the time of year, the aspect angle (90° is normal incidence), the satellite-sun distance in astronomical units (A.U.), and the cell temperatures in degrees Celsius, of the selected observations.

In the "time after launch" number, the digits to the left of the decimal point give the day number of the year (counting January 1 as day 1). The digits to the right of the decimal point give the part of that day that had elapsed, at the time of observation.

Good data was obtained for about 270 days after launch, when a malfunction in the memory occurred. Then, about 415 days after launch, the apparatus revived for a few days. The useful experiment duration was thus about 417 days or 1.14 years.

The switching circuitry of cell 19 became erratic shortly after lift-off. However, the fragmentary data that was later obtained showed that this cell was performing in a manner similar to its companion, cell 20.

THE DATA AND ITS PROCESSING

Uncorrected Data

Figure 3 shows the circuitry involved in taking data for a single point on a solar cell voltage-current characteristic. Assume the two relay contacts to be closed and time of observation to be that, when, during spin, the cell illumination is closest to the perpendicular. The subscript (m) gives the cell number (1 to 30); the subscript (n) gives the load resistor number (1 to 8).

The analog-to-digital converter samples the voltage, V_c, which then exists across the nominal load resistor selected, of value R_n. This voltage is evaluated in the 8 bit converter, whose resolution is 3 millivolts, to an 8 bit digitized signal. Its decimal value is $S_{m,n}$. It is stored in the memory.

These numbers were subsequently telemetered to ground in 4 bit pieces by a pulse frequency modulation telemeter and recorded on magnetic tape. From this it was eventually decoded and its decimal value, $S_{m,n}$, which ran from zero to 255 units, was recovered.

The telemetered voltage (in millivolts) was then calculated from

$$V''_{m,n} = \frac{3\,N\,(S_{m,n} - Z)}{K - Z} \quad . \tag{1}$$

The number "3" is the ideal design number of millivolts each unit of $S_{m,n}$ was worth. Also "N" is the ideal telemetry response (160 digital units) to the on board calibrating signal (480 millivolts) whose actual transmitted value was "K." Quantity "Z" was the telemetry response to a calibrating voltage of zero value.

Equation (1) is of standard form for correcting a linear system for drifts in zero and gain.

Actually, during the life of this experiment no drifts were observed, N equalled K, and Z was zero, so (1) became

$$V''_{m,n} = 3\,S_{m,n} \quad . \tag{2}$$

By Ohm's law, the current in the nominal load resistor (R_n) was calculated from

$$I''_{m,n} = V''_{m,n} / R_n \ , \tag{3}$$

in milliamperes (ma). This is the current given in column 3 of Table III.

Further, the terminal voltage, in mv, across the cell was given by

$$V''_{m,n} = I''_{m,n} \, R_{m,n} \ , \tag{4}$$

where $R_{m,n}$ is the known total load resistance seen by the cell, as determined by pre-launch measurements.

The above value of $V''_{m,n}$ is given in column 4 of Table III.

The "uncorrected" currents and voltages calculated by the above methods and shown in columns 3 and 4 of Table III describe the characteristics of the cells under the conditions obtaining in orbit at the time of observation. While they are not corrected for the moderate changes in illumination and temperature that took place during the duration of this experiment, they are necessarily free of any distortions that might have arisen from less than perfect corrections to the data. These data, therefore, are probably better than the "corrected" data to be given later if any analyses of voltage-current curve shapes are attempted, as by fitting the classic solar cell equation to the data. Wolf [6] has developed a computer program to fit the solar cell equation to such data. He has found that a double exponential is often required. The physical significance of this remains obscure.

The uncertainties in the uncorrected data are principally those associated with the digitizing of the signals on the spacecraft. Since the telemetered signal was evaluated in 3 millivolt steps, the maximum possible uncertainty in that quantity, with a perfect converter, would be ±1.5 mv, or 1/2 unit of $S_{m,n}$ of Equation (1). Consideration of the possibilities of slight instrument drifts and the uncertainties in the load resistors leads to an increase in the maximum probable uncertainty of the voltage coordinate of an "uncorrected" data point to ±2.0 mv. In the region of maximum power, for lightly damaged cells, (about 460 mv), this leads to an uncertainty of ±0.43 percent, in voltage.

The uncertainty in the "uncorrected current" for each observation is judged to be rarely greater than the quotient of the uncertainty of the voltage and the nominal value of the load resistor involved. This leads to current uncertainties of ±0.67 ma, ±0.44 ma, ±0.33 ma, ±0.25 ma, ±0.20 ma, ±0.13 ma, ±0.08 ma, and ±0.001 ma for the nominal load resistances of 3, 4.5, 6, 8, 10, 15, 25, and 2000 ohms, respectively.

The evaluation of the maximum power from a given solar cell under given conditions involves drawing a voltage-current curve, determining the maximum power point, and then multiplying the current and voltage obtaining at that point. For a lightly damaged conventional cell the total uncertainty which will rarely be exceeded is judged to be ±1% in power. This becomes greater as the cell becomes damaged.

To summarize, the maximum probable uncertainty in the "uncorrected voltages" is ±2 mv. The uncertainty in the "uncorrected current" (in ma) is 2 mv divided by the nominal value of the load resistor (in ohms).

Corrected Data

It is desirable, for some purposes, to remove from the data the irrelevant effects of varying angle of illumination, varying satellite-sun distance, and cell temperature.

The "corrected" solar cell currents, in ma, were calculated from

$$I_{m,n} = \frac{\frac{3\,N\,(S_{m,n} - Z)}{K - Z}\,A_{m,n}\,(1 + BC_{m,n})}{R_n} + (24.4 - T)\,K_I\,, \qquad (5)$$

where, N, $S_{m,n}$, Z, K, and R_n are as given before.

$A_{m,n} = V_{m,n,90°}/V_{m,n,\theta}$ = correction for aspect angle of illumination, with $V_{m,n,90°}$ and $V_{m,n,\theta}$ being read from calibration curves at aspect angles 90° and $\theta°$.

$B = R^2 - 1$ = fractional deviation of illumination from 1 sun.

R = earth-sun distance, in astronomical units, obtained from "American Ephemeris and Nautical Almanac" for day of observation.

$C = (1 + K_{m,n})/(1 + K_{m,1})$ = load resistor correction for earth-sun correction.

$K_{m,n}$ = ratio of average response of cell at aspect angles of 50° and 130° to maximum response of cell near 90°.

T = Cell temperature, °C.

The first factor in the numerator of the fraction in Equation (5) corrects for telemetry defects, which were actually negligible.

The "$A_{m,n}$" factor corrects the data to perpendicular illumination, using pre-launch calibration curves. The maximum aspect angles, in orbit, were

24° from normal. The aspect angle was read to about ±0.75 degree. The extreme values of $A_{m,n}$ were about 0.90 and 1.10. Use of the cosine law would lead to large errors.

While the factor "B" is considered directly applicable for correcting for illumination changes caused by varying satellite-sun distance near short-circuit current ($n = 1$) its effect must be reduced as the load resistor assumes larger values ($n > 1$, $R_{m,n} > 3$) by introduction of the factor "C". This factor, obtained from the aspect angle calibration curves, reduces the effect of varying illumination as the load resistor is increased in size. The extreme values of $(1 + BC)$ were about 0.97 and 1.03.

The second term in Equation (5) corrects the current to a common temperature of 24.4°C. The temperature coefficient, K_I, was taken as 0.0758 ma/°C from data for some 10 ohm-cm cells and is approximate. For these observations the extreme temperatures were 19.0°C and 28°C, so the current corrections were small, extreme values being ±0.41 ma.

The "corrected currents" are given in column 5 of Table III.

The "corrected voltages" were calculated from

$$V_{m,n} = I'_{m,n} R_{m,n} + (24.4 - T) K_{v,m}$$

in millivolts.

Here $I'_{m,n}$ is the first term of Equation (5).

$K_{v,m}$ = temperature coefficient of voltage, as determined by observing, in orbit, the changes in open circuit voltage of each cell with temperature, at 10 days after launch. These ranged from -1.77 mv/°C to -2.84 mv/°C.

It has been assumed that the coefficients and calibration curves remained applicable during the life of the experiment.

The "corrected voltages" are given in column 6 of Table III.

The uncertainties of the "corrected" currents and voltages are difficult to assign. Since the corrections are not perfect, doubling the uncertainties given above for the "uncorrected" data may serve as a guide.

The use of the "corrected" data is preferable in showing the way the cells degraded with time in orbit and in comparing the final amounts of damage incurred by the various cells.

The number of significant figures given in Table III is somewhat greater than justified by the uncertainties previously discussed.

Voltage-Current Characteristics

Figures 4 to 61 are from notebook curves plotted using "uncorrected" data for four times after lift-off.

The eight points available per curve delineate its shape very well. A smooth curve can almost always be drawn through or very near the points. Very rarely does the discrepancy between point and smooth curve exceed the uncertainty associated with the digitizing process, discussed above. However, the smallest load resistor used (3 ohms) is not small enough to define the short-circuit current with high accuracy, especially for unshielded cells 14, 25, and 26. The slope near short-circuit current is also not well defined. Finally, there is some freedom in drawing the curves through the maximum power region, which introduces an uncertainty in the maximum power value and its location. However, independent evaluations of the value of maximum power for a given set of data usually agree to a few tenths of a milliwatt. The open-circuit voltage is well defined.

Figures 62 to 235 are from notebook curves plotted using "corrected" data for 12 times after lift-off.

Because of imperfections in performing the corrections, deviations between data points and smooth curves are, in general, larger than for the "uncorrected" curves.

Nevertheless, the smoothness of the curves and the absence of trends correlated with changing illumination or temperature are gratifying. The relatively small and slow decrease in open-circuit voltage for the shielded cells speaks well for the temperature correction of voltage. The small changes in open-circuit voltage, for shielded cells, must be significant in assigning or rejecting possible causes for the cell damage observed.

DISCUSSION

These results are based on precise machine calculations, using all calibration information most carefully. They differ slightly from the data in previous publications about this experiment. However, none of the conclusions reached are altered.

For completeness these conclusions are summarized below. It must be remembered that these results were obtained using certain solar cells of limited number and bearing shields attached and aligned in the usual less-than-perfect manner; that the environment involved a particular transfer orbit and residence at synchronous altitude during a certain period of time; that certain errors were inherent in the digitizing of the data; that the range of load resistors was limited; and that corrections for irrelevant variables, when attempted, was necessarily not ideal. Nevertheless, the results are based on close in-orbit observations of the behavior of representative solar cells under actual space conditions, and therefore merit some consideration.

1. Unshielded solar cells degraded markedly during execution of the transfer orbit.

2. Unshielded 1 and 10 ohm-cm resistivity cells degraded greatly and similarly, in power.

3. Unshielded cells degraded, at synchronous altitude, generally by a series of steps whose timing correlated well with the arrival of solar flare particles.

4. Many shielded cells showed an initial, temporary, improvement in performance during the first week in orbit.

5. In a series of cells of similar character and shielding a base resistivity of 10 ohm-cm was optimum, (as judged by maximum power developed).

6. Special blue-sensitive cells, shielded with 30 mils of sapphire and no adhesive degraded, in power, about the same amount as conventional cells with conventional 60 mil shields.

7. Cells shielded with type 0211 glass degraded slightly more than those shielded with type 7940 fused silica.

8. Cells with uniform base doping were superior to those with graded doping (drift-field).

9. There was little difference between use of aluminum or boron as a base dopant.

10. The degradation of heavily shielded cells was particularly prominent in the maximum power region of their characteristics.

11. The short-circuit current and open circuit voltage properties of the members of a series of similar cells were found to be best preserved by the use of shields of greatest thickness (60 mils).

12. The maximum power capability of a series of similar cells was best preserved by the use of shields of an intermediate thickness of about 6 mils (between 1 and 15 mils). The use of either thicker or thinner shields increased the damage to the important power-producing capability of the cells. This peculiar result, if substantiated by other tests, can greatly influence the design of space power panels from both weight and cost standpoints.

13. From these results, and judging only from a maximum power standpoint, the best cells were silicon, n-on-p type, boron or aluminum doped, of 10 ohm-cm base resistivity, bearing shields of 6 mils of 7940 fused silica.

ACKNOWLEDGEMENTS

I wish to acknowledge the invaluable assistance of Clarence B. House in procuring the memory section of the apparatus and in testing and adjusting the equipment before launch.

Ralph Sullivan (now with Johns Hopkins Applied Physics Laboratory) supervised the procurement, assembly, and meticulous calibration of the panel of experimental solar cells.

John Wolfgang devised hardware that proved essential in testing and trouble-shooting the equipment.

The advice and skill of J. Perry in the fabrication and assembly of certain parts was invaluable.

Andrew J. Malinowski designed the excellent 8 bit analog-to-digital converter.

Everett J. Pyle, Jr. helped secure the solar aspect sensor and associated circuitry.

I am indebted to Roland Van Allen for his assistance in budgeting, scheduling, and integrating the equipment with the spacecraft.

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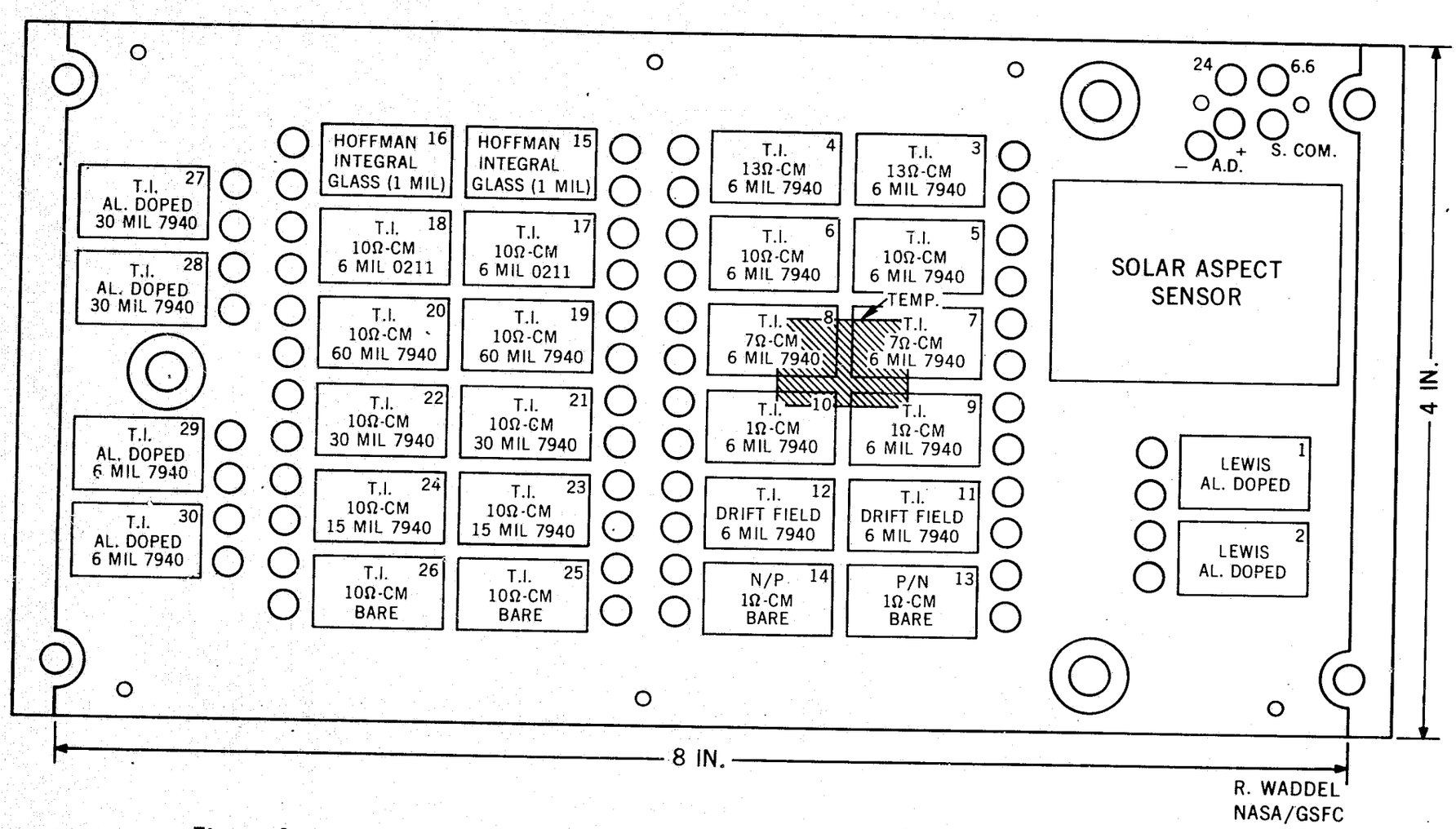

Figure 1. Lay-out of the Front Panel of the Solar Cell Radiation Damage Experiment

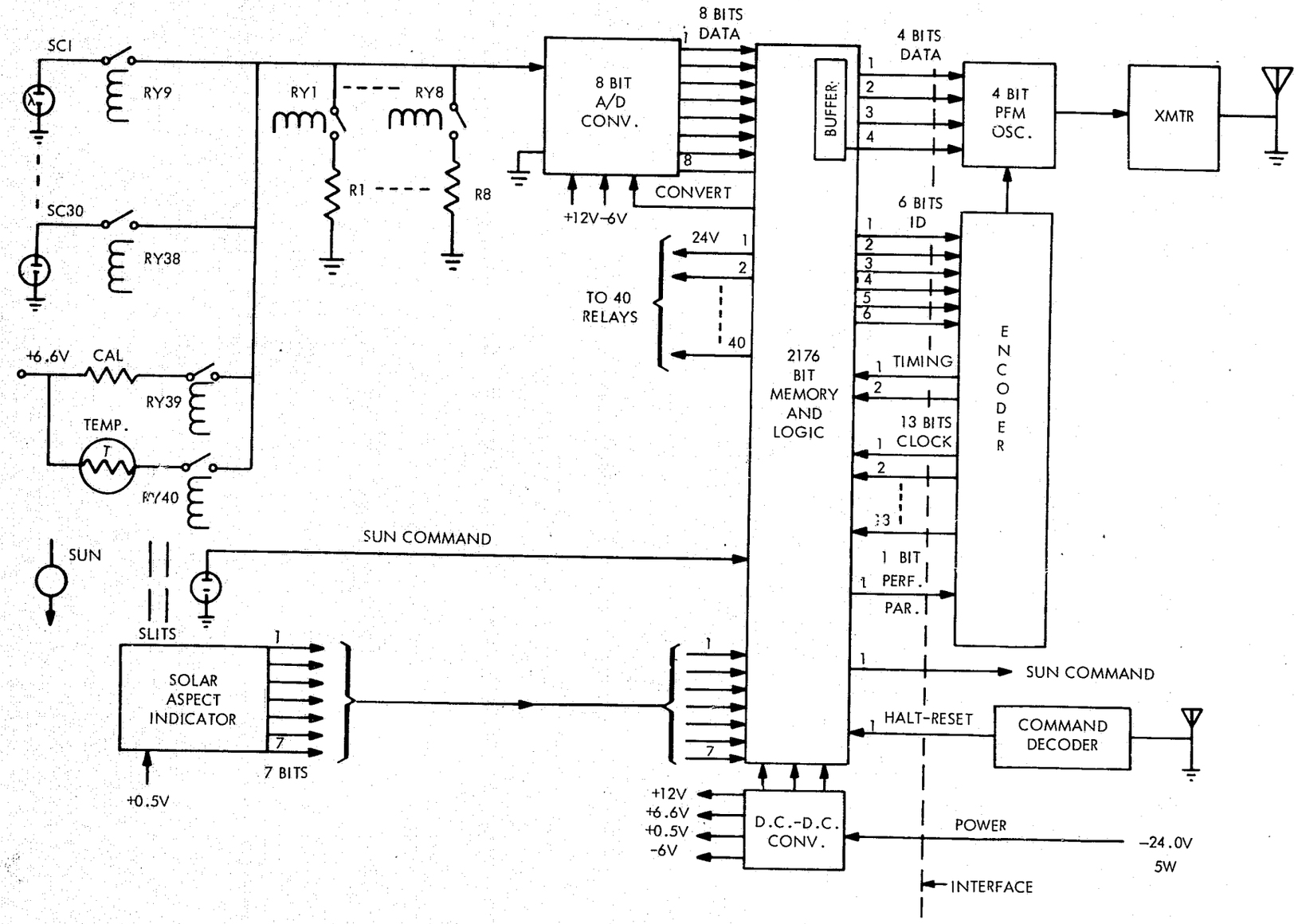

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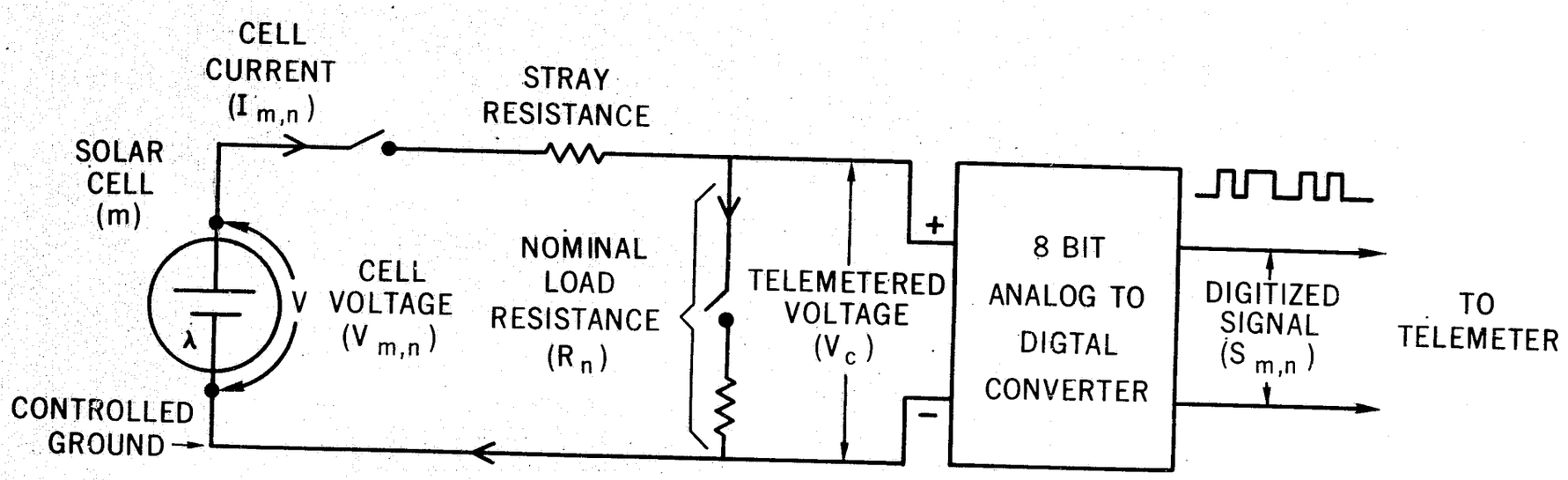
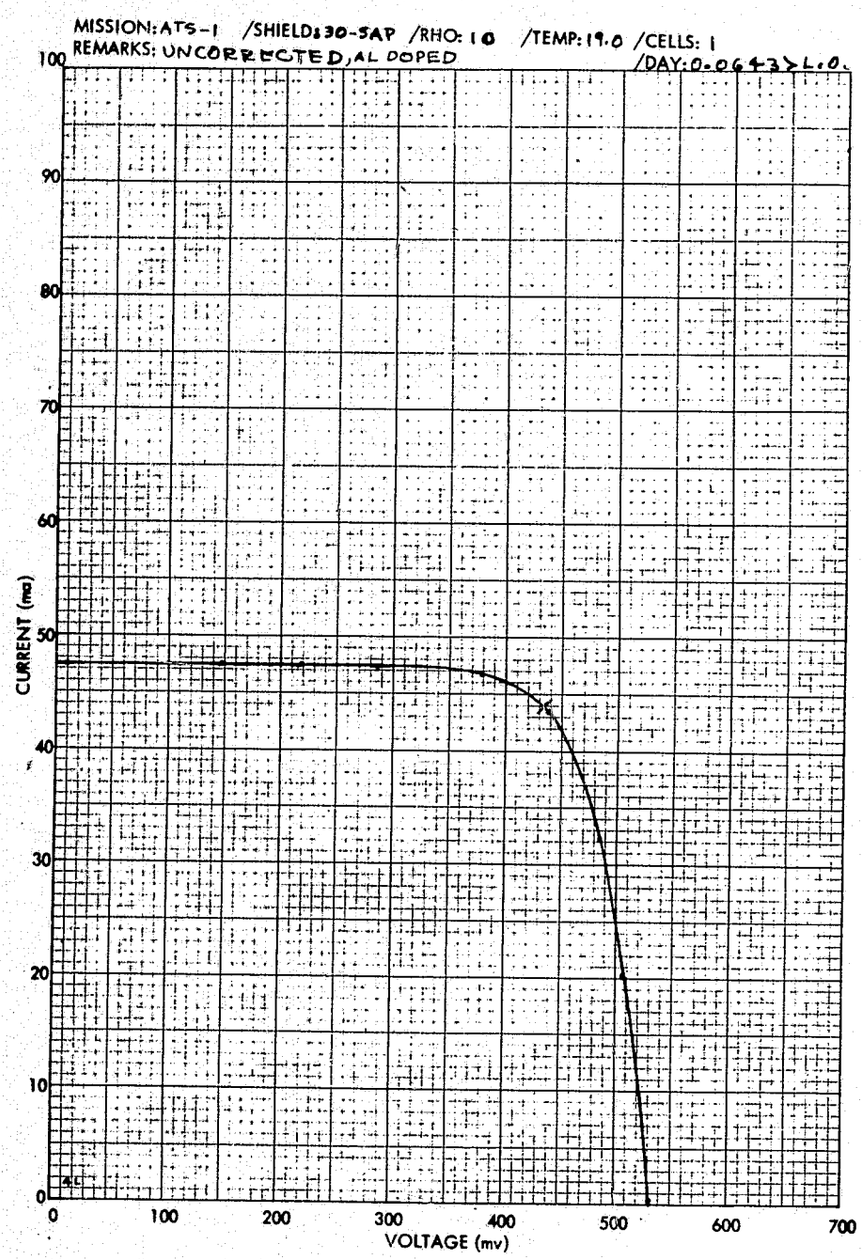
Figure 2. Block Diagram of the Experiment



TOTAL LOAD RESISTANCE = R_n + STRAYS = $R_{m,n}$

Figure 3. Solar Cell Load Circuit



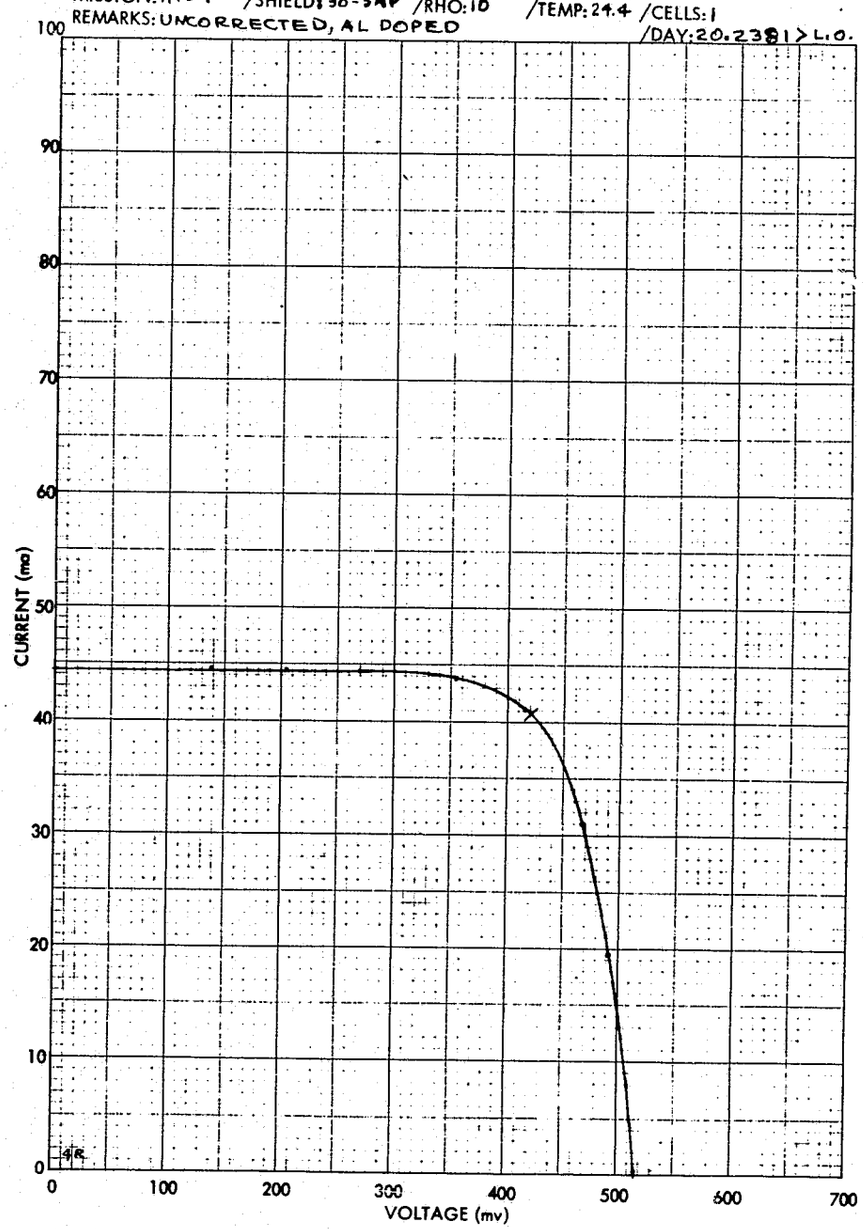
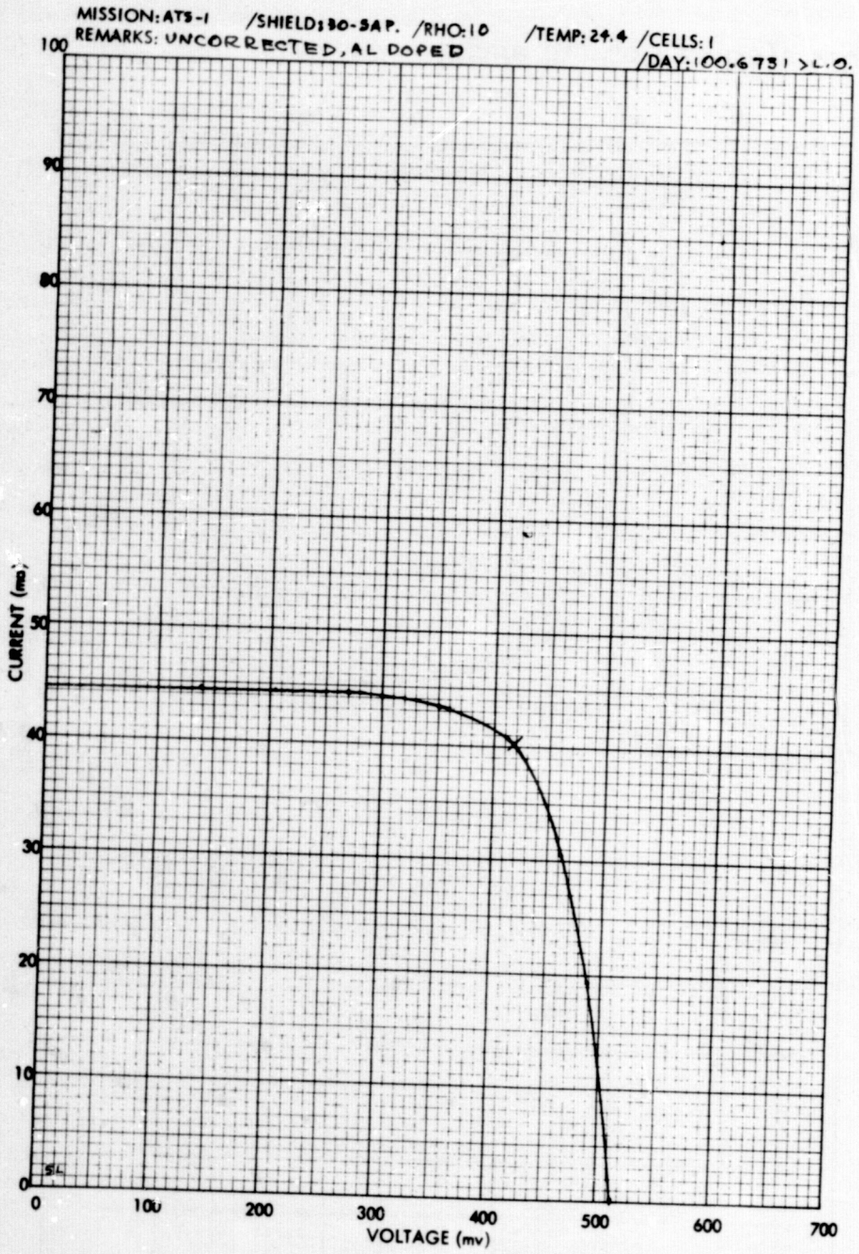


Figure 4. Cell 1, Days 0.064 and 20.3. Uncorrected Data



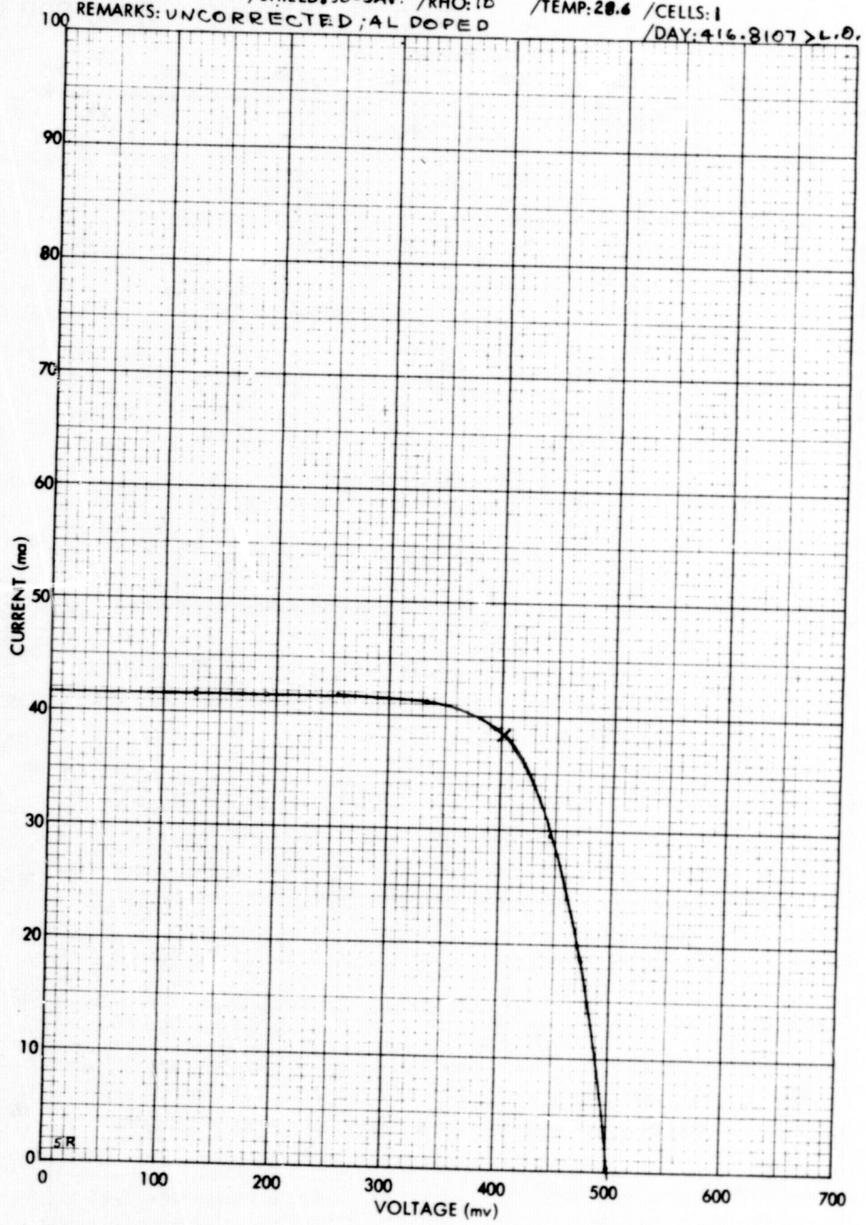
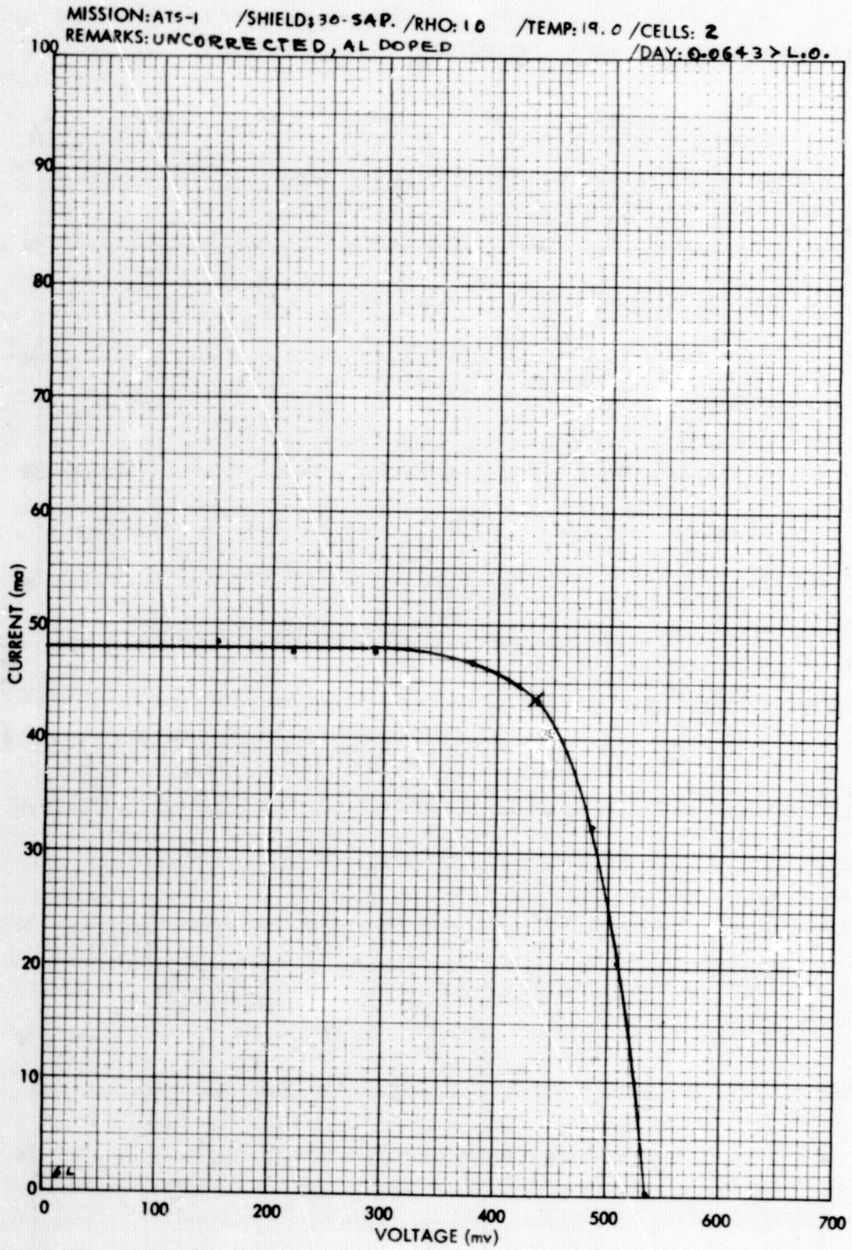


Figure 5. Cell 1, Days 100.6 and 416.8. Uncorrected Data



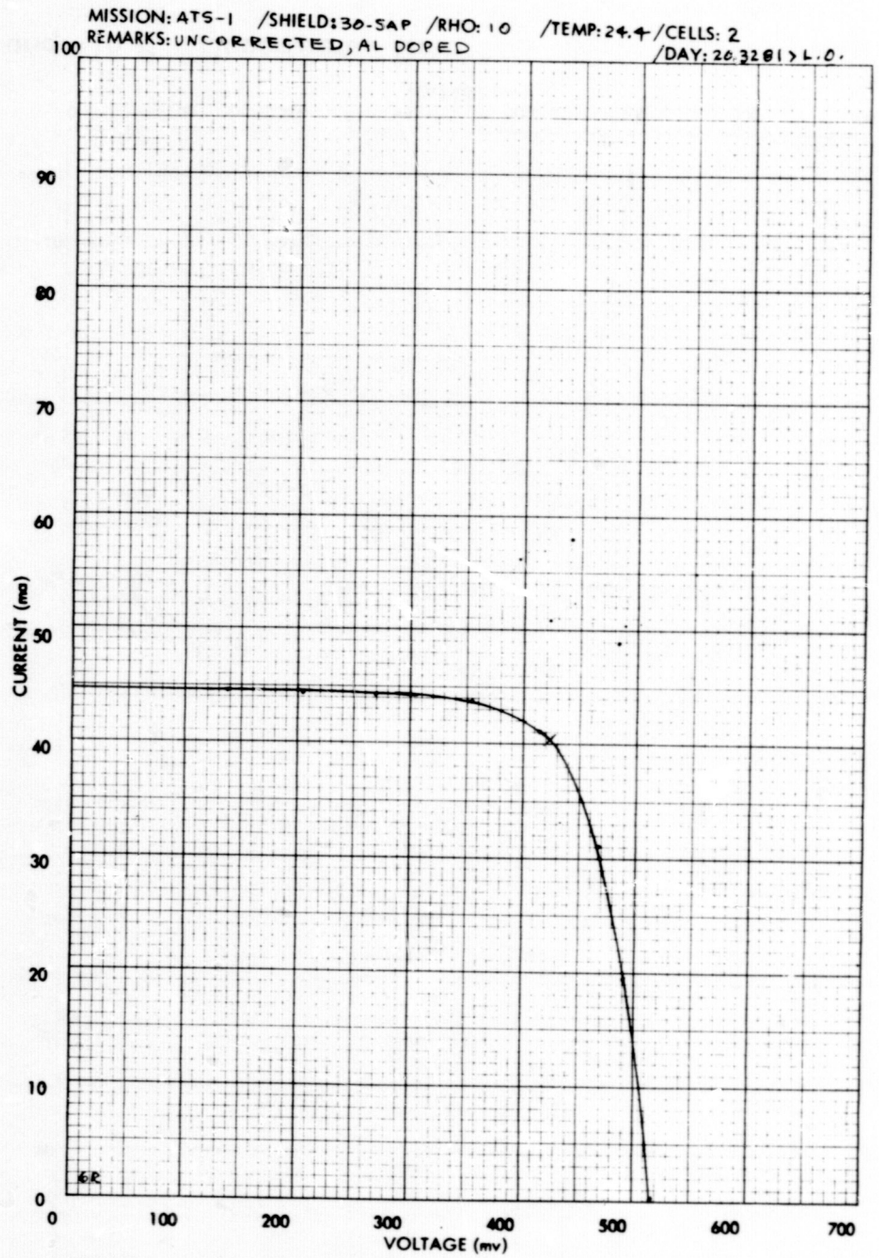
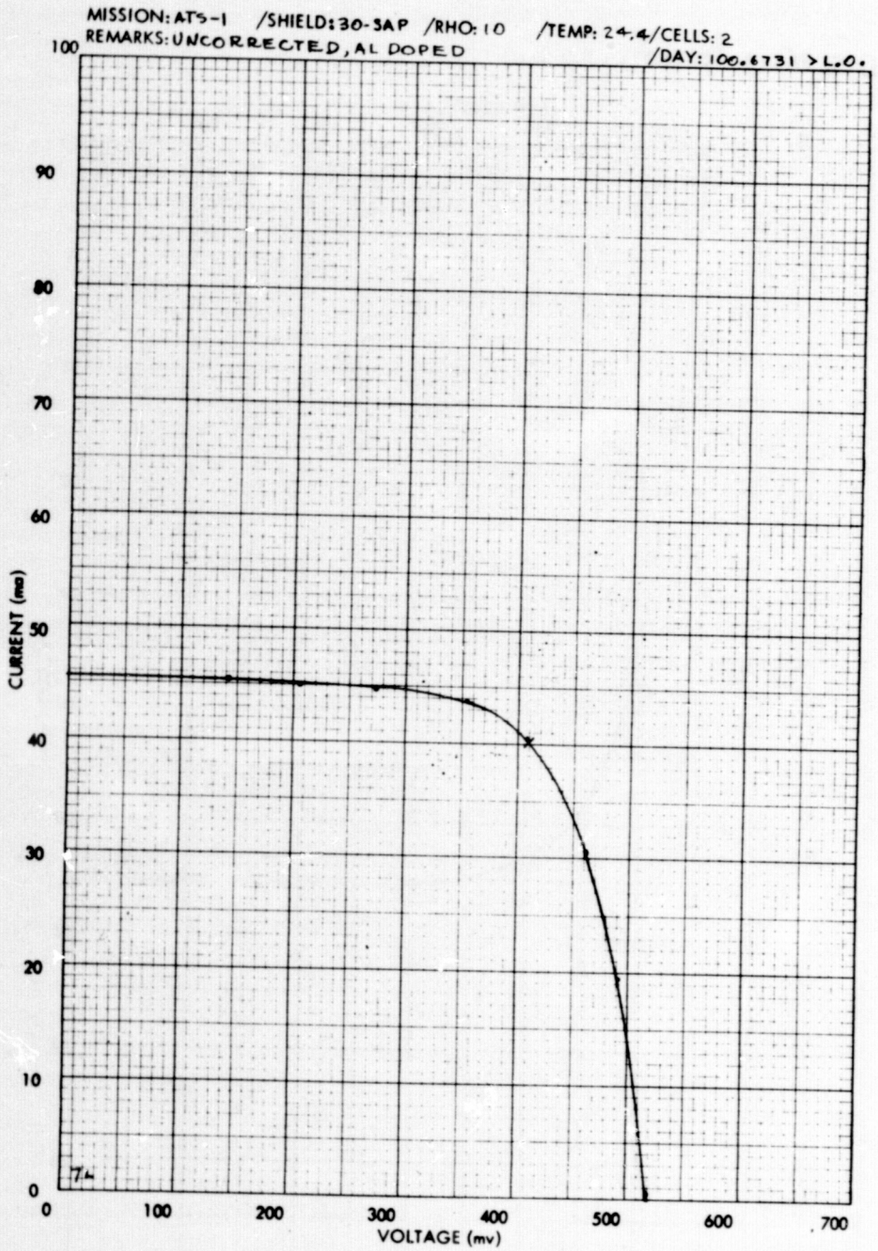


Figure 6. Cell 2, Days 0.064 and 20.3. Uncorrected Data



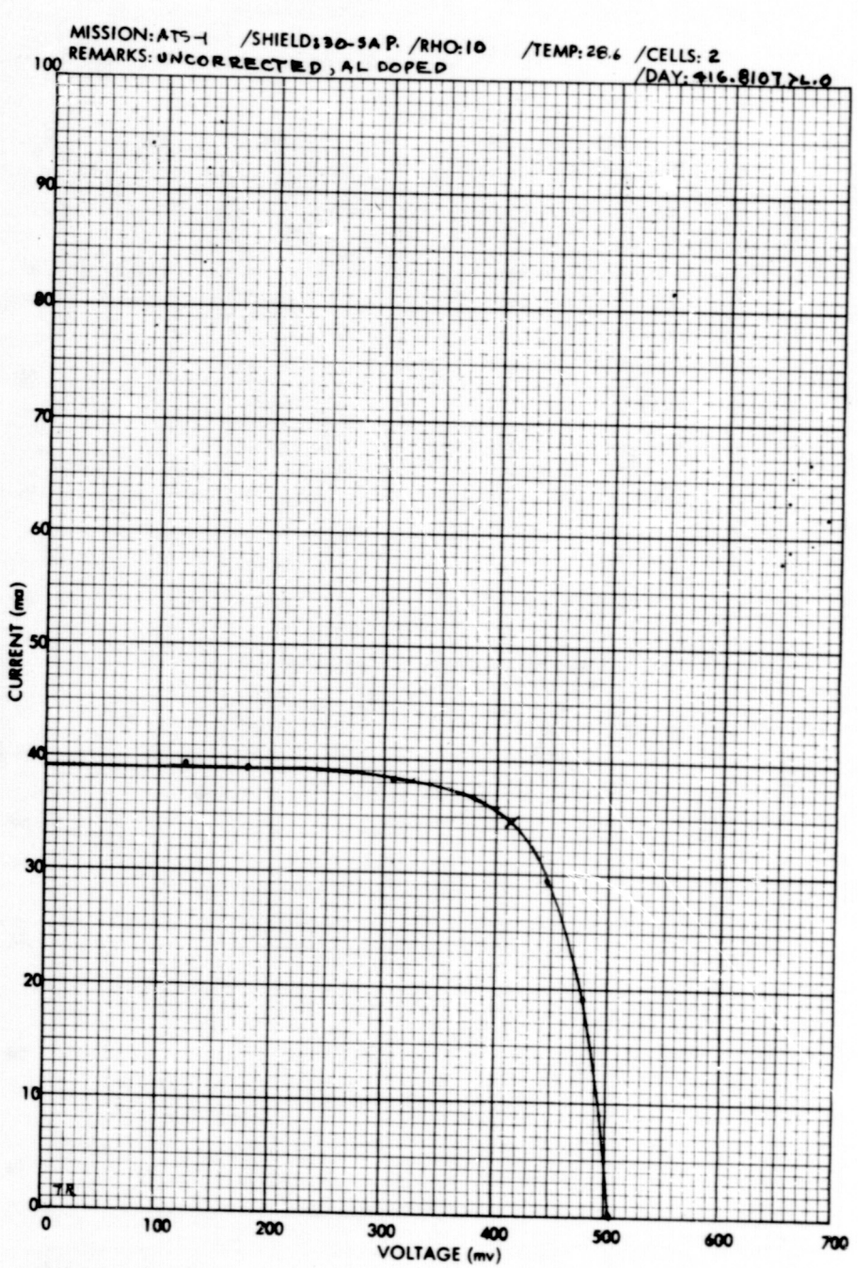
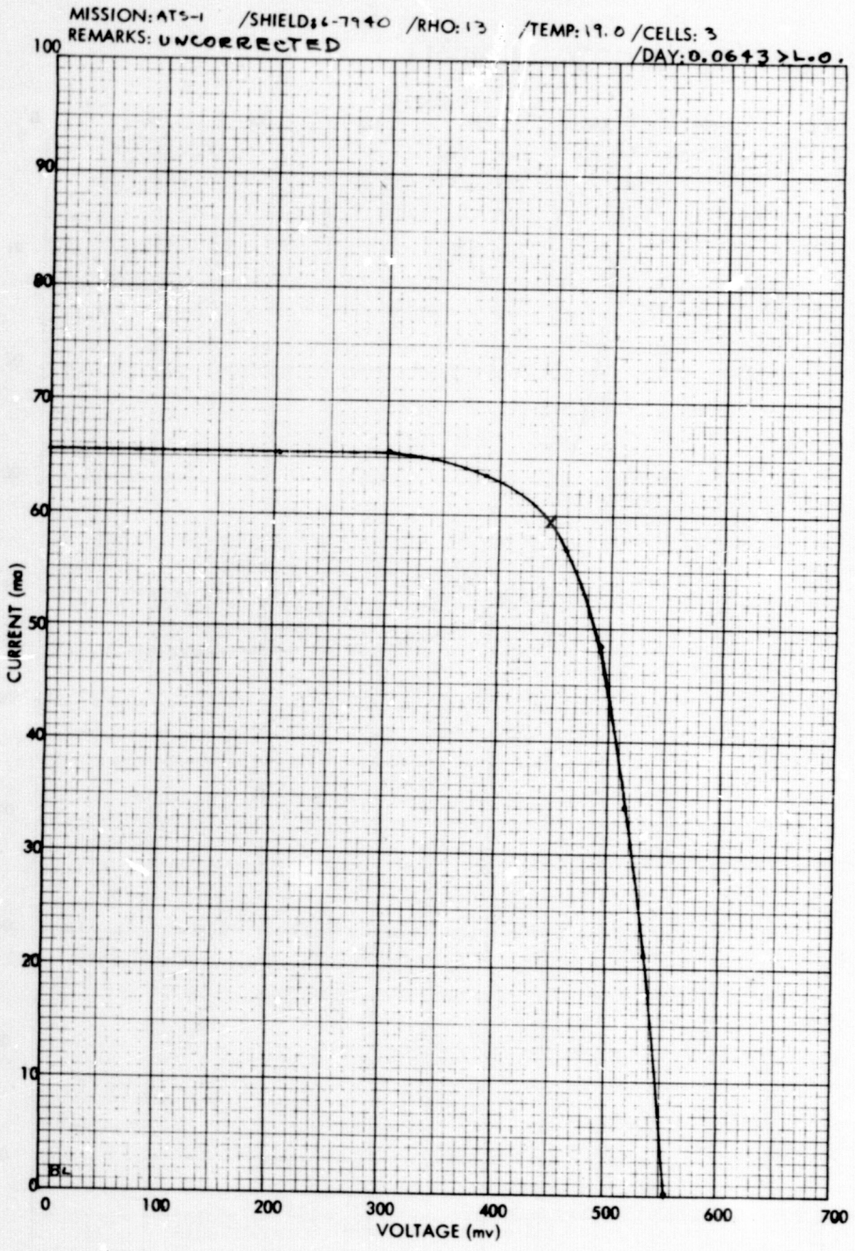


Figure 7. Cell 2, Days 100.6 and 416.8. Uncorrected Data



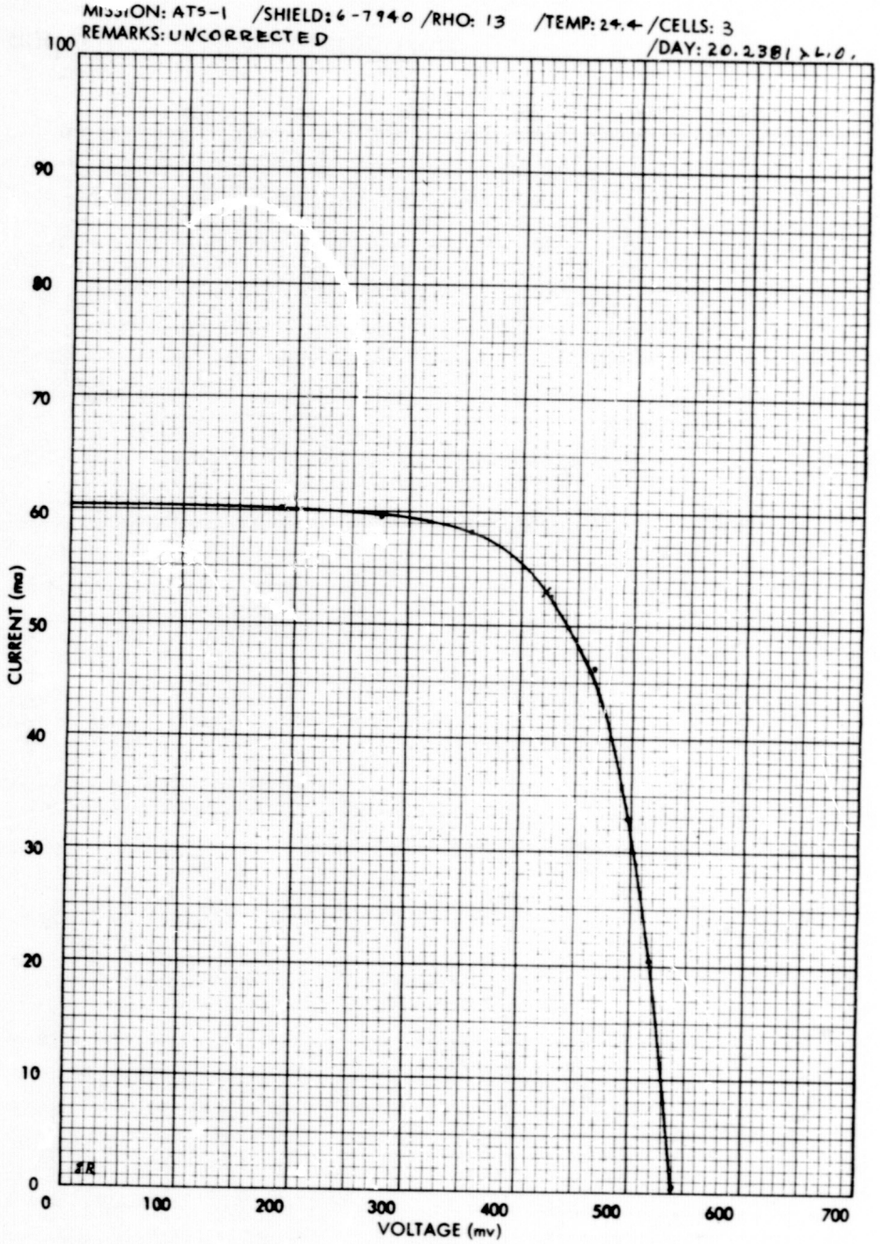
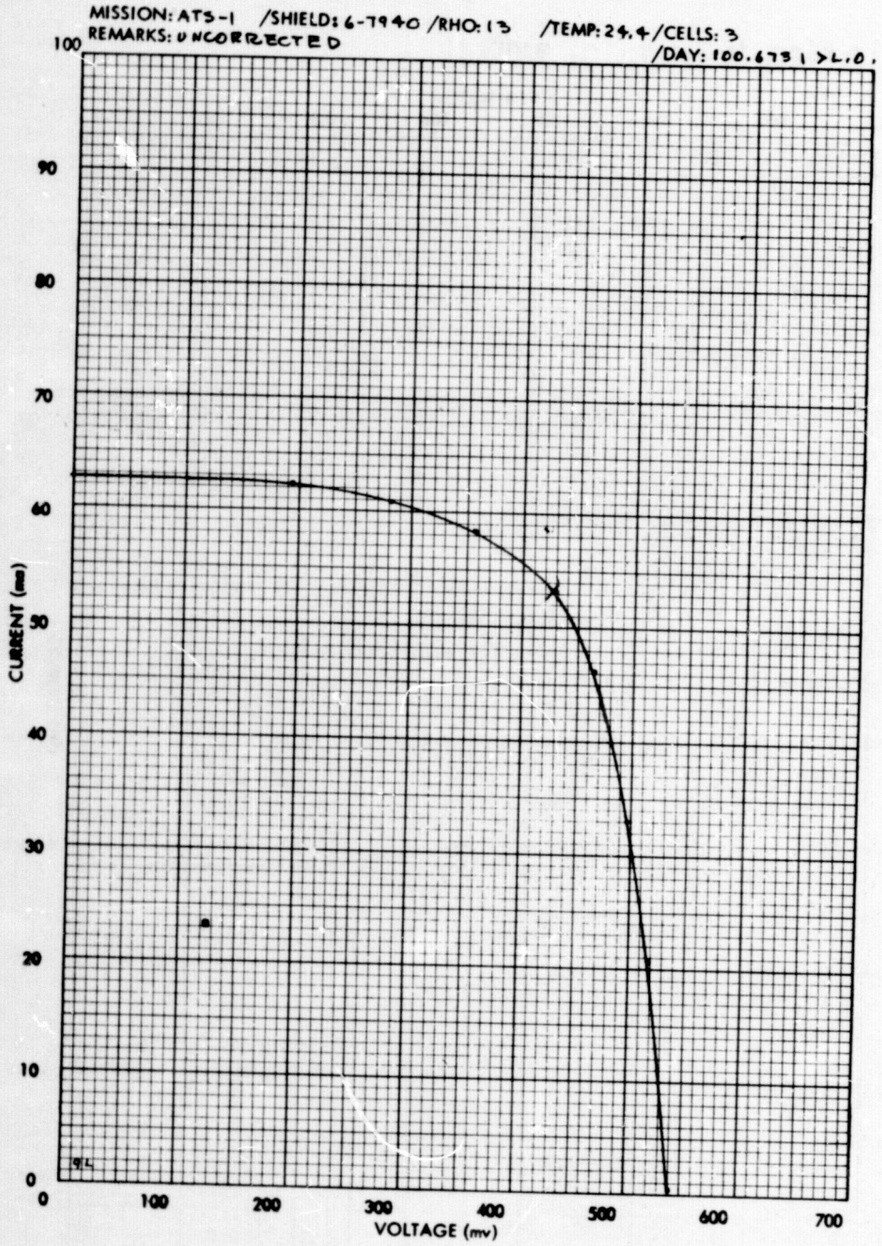


Figure 8. Cell 3, Days 0.064 and 20.3. Uncorrected Data



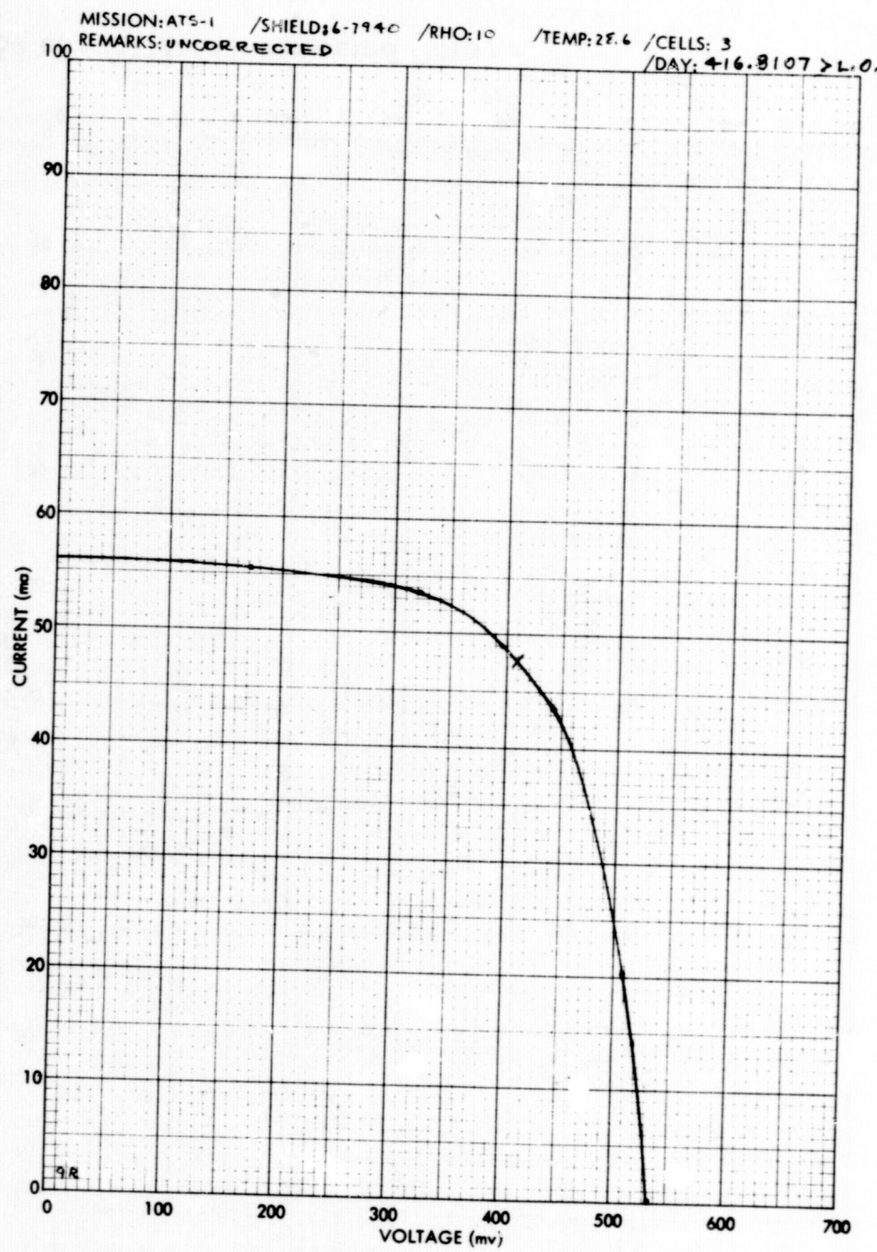


Figure 9. Cell 3, Days 100.6 and 416.8. Uncorrected Data

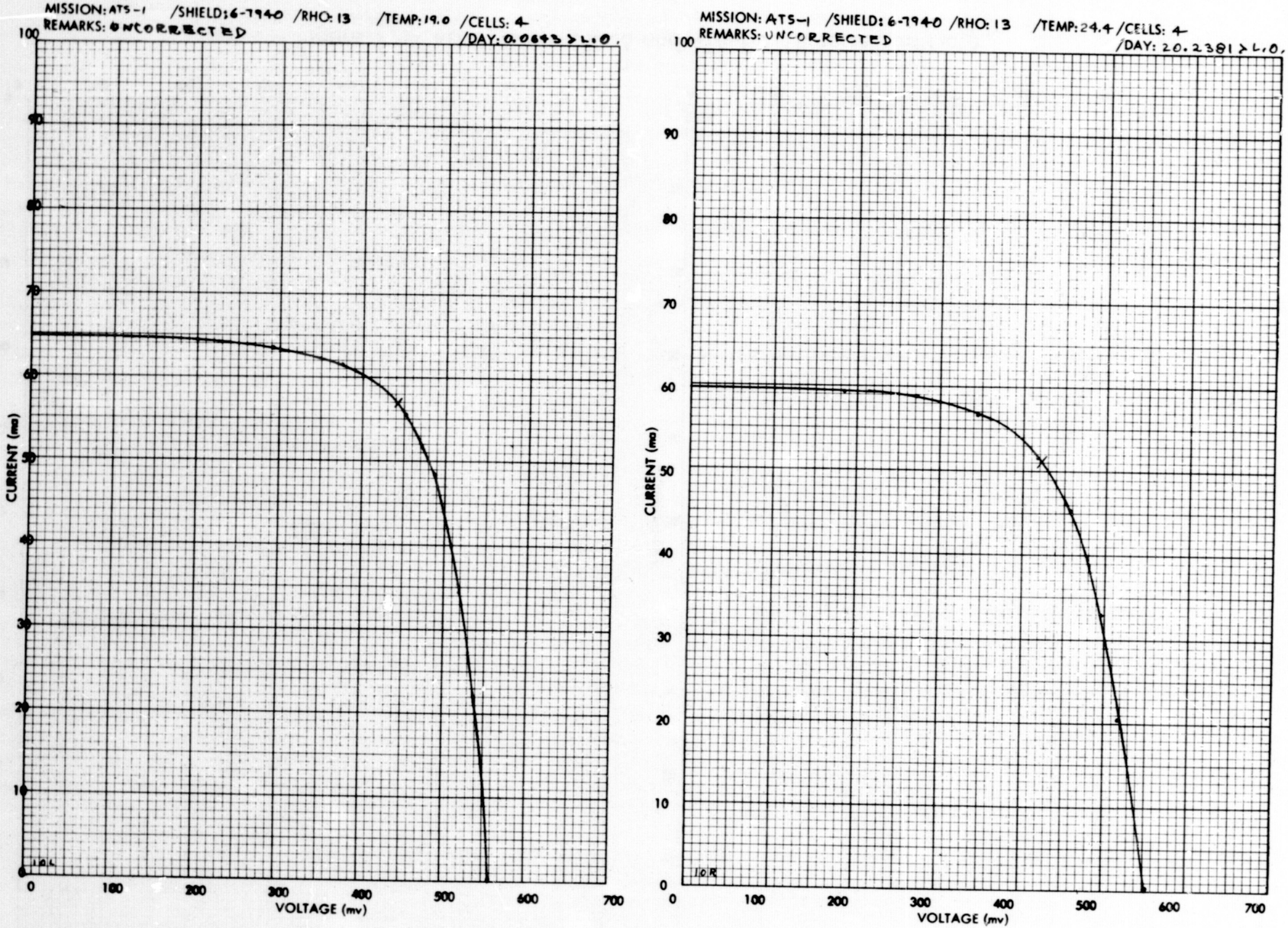


Figure 10. Cell 4, Days 0.064 and 20.3. Uncorrected Data

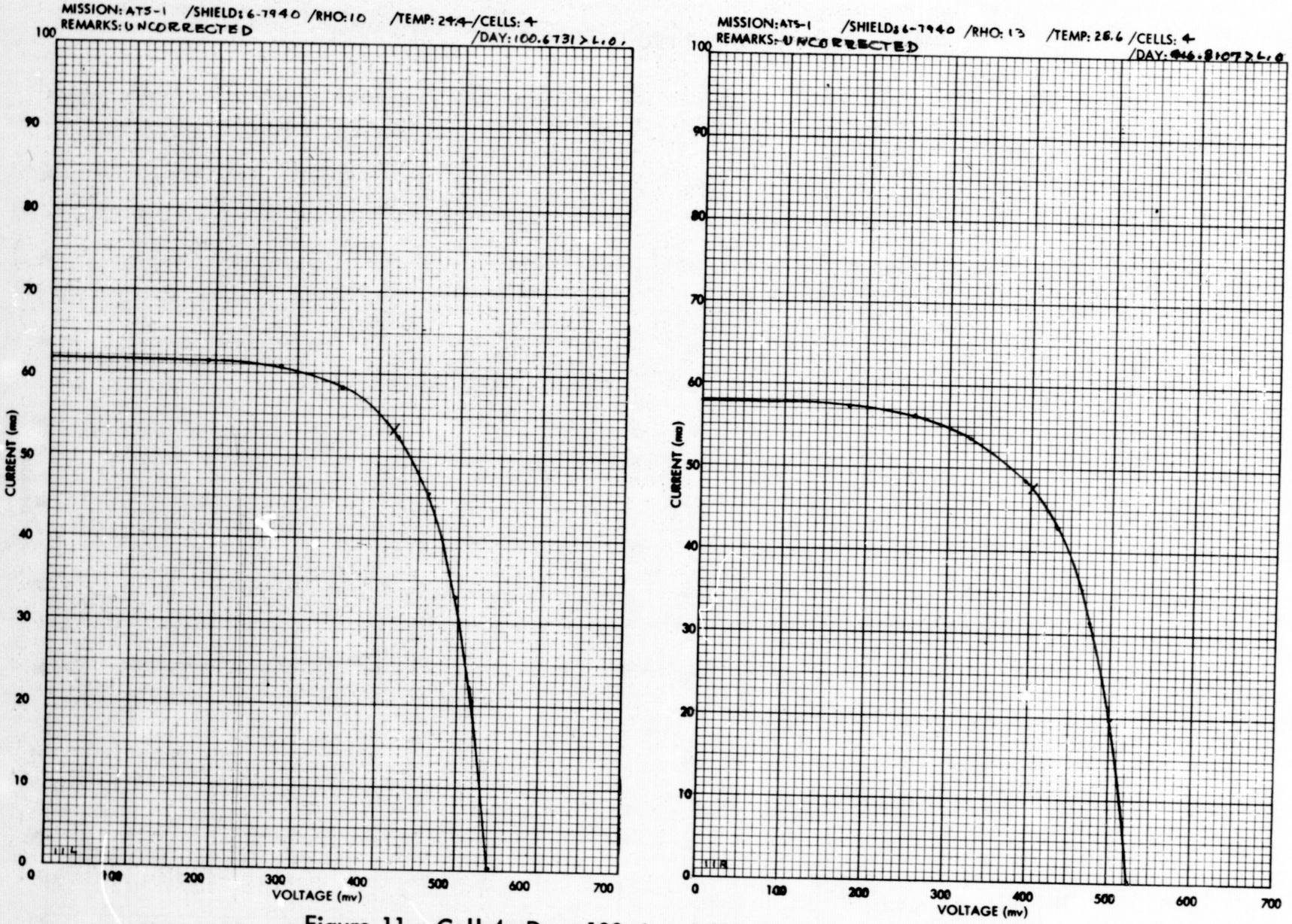
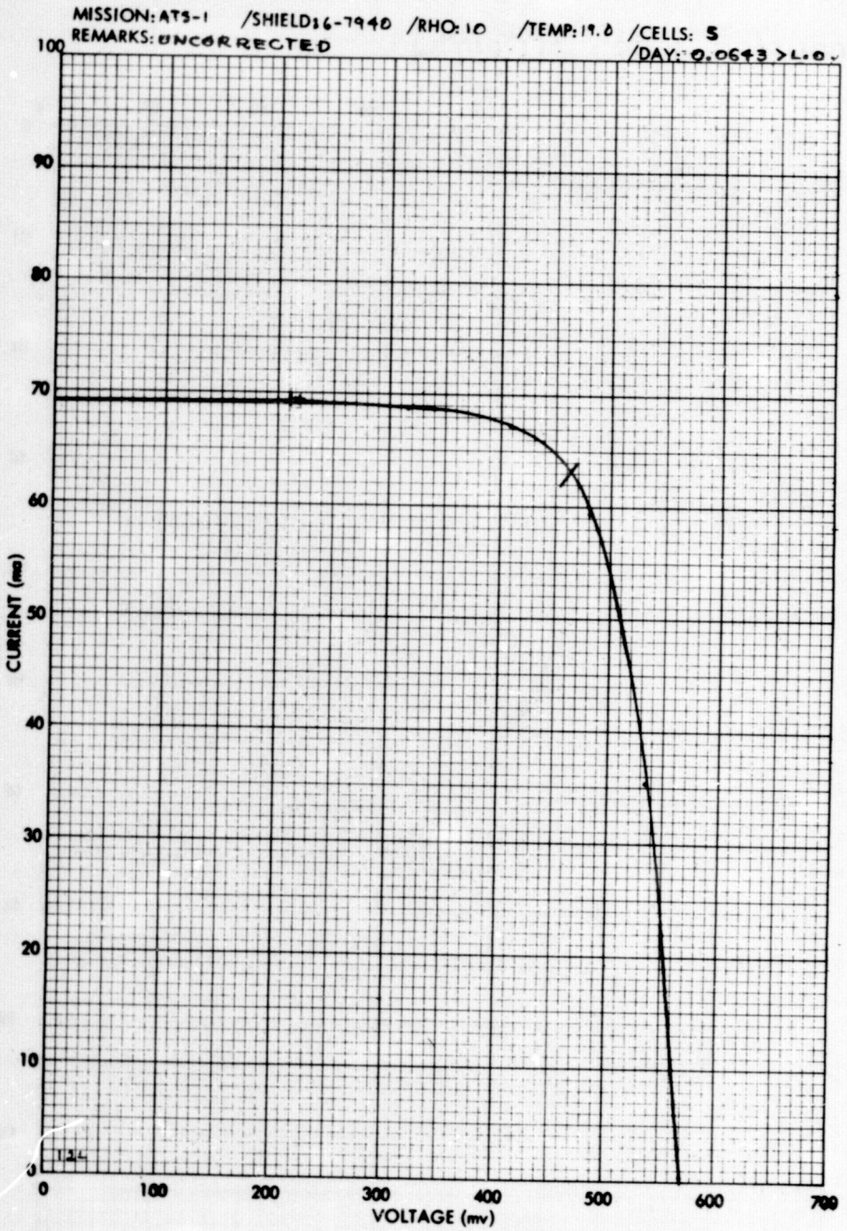


Figure 11. Cell 4, Days 100.6 and 416.8. Uncorrected Data



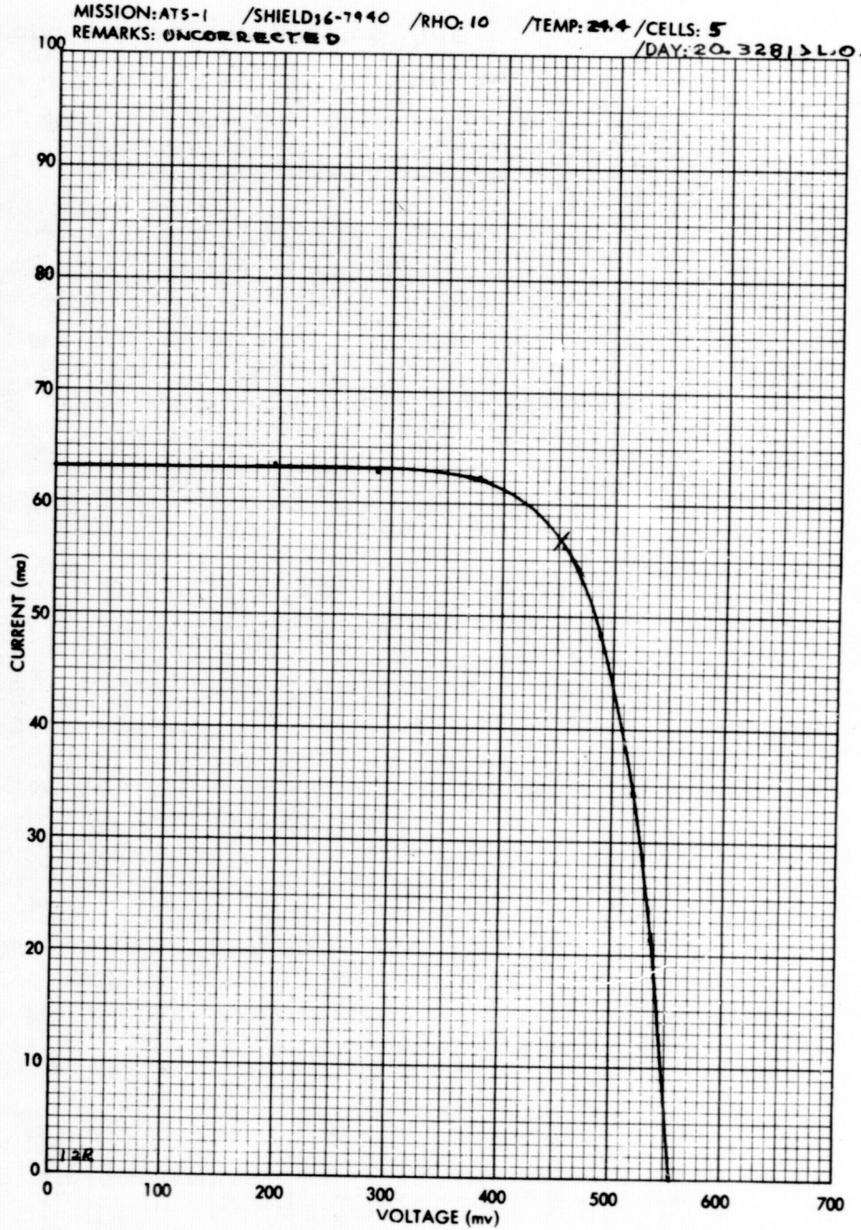
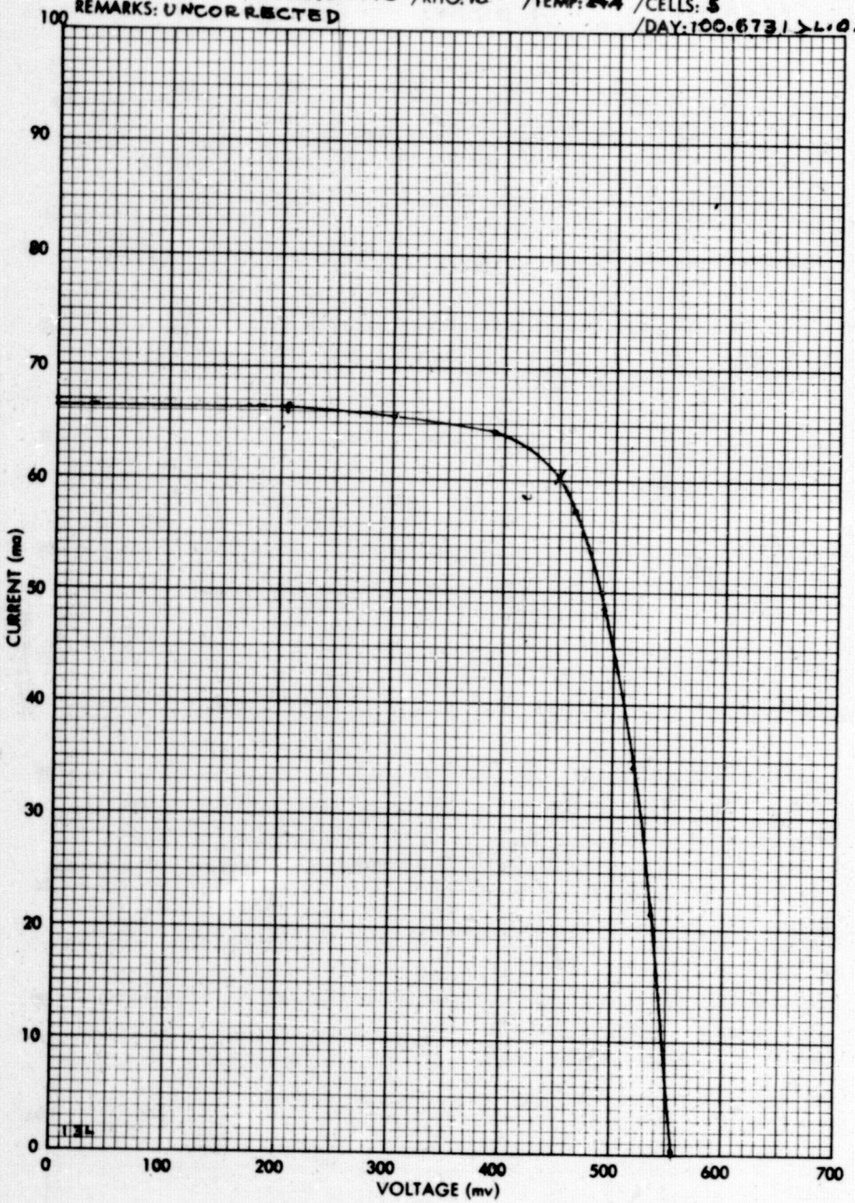


Figure 12. Cell 5, Days 0.064 and 20.3. Uncorrected Data



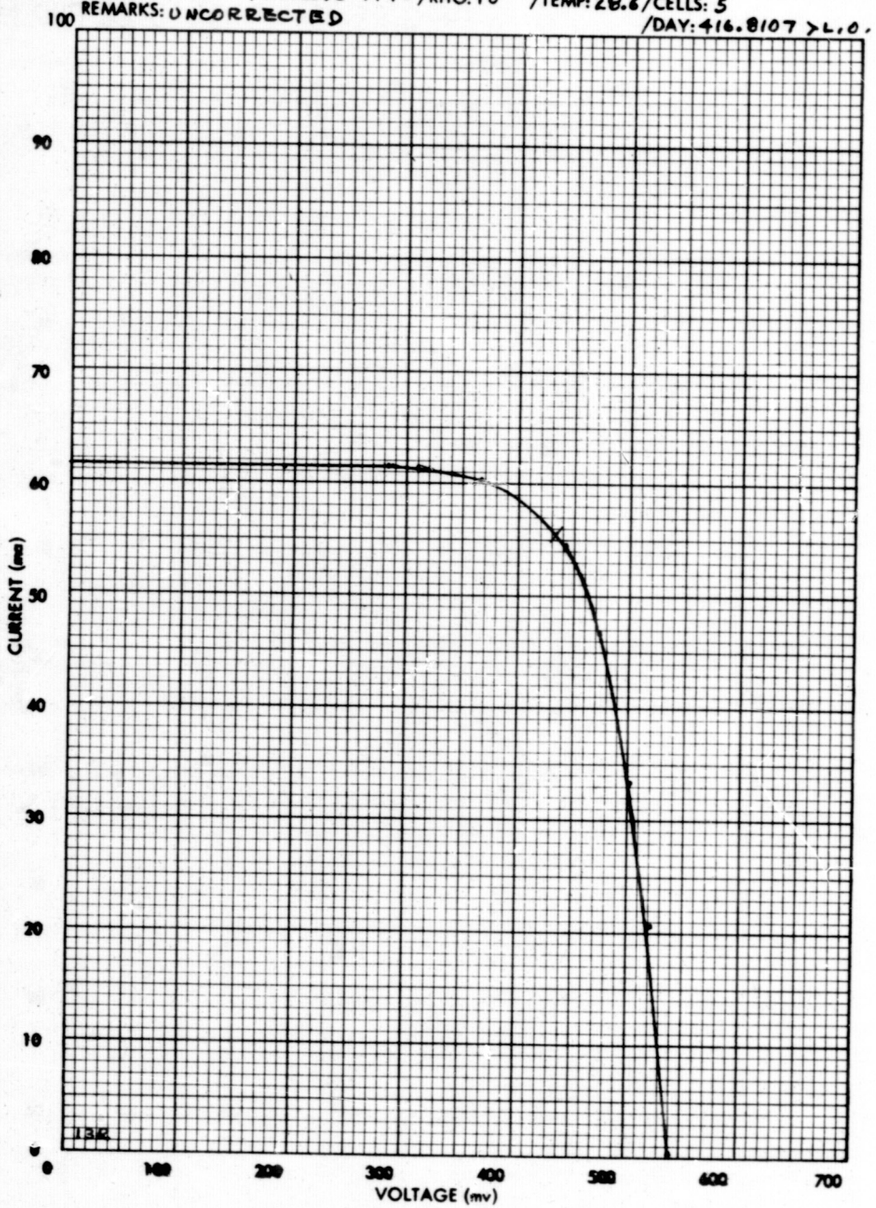
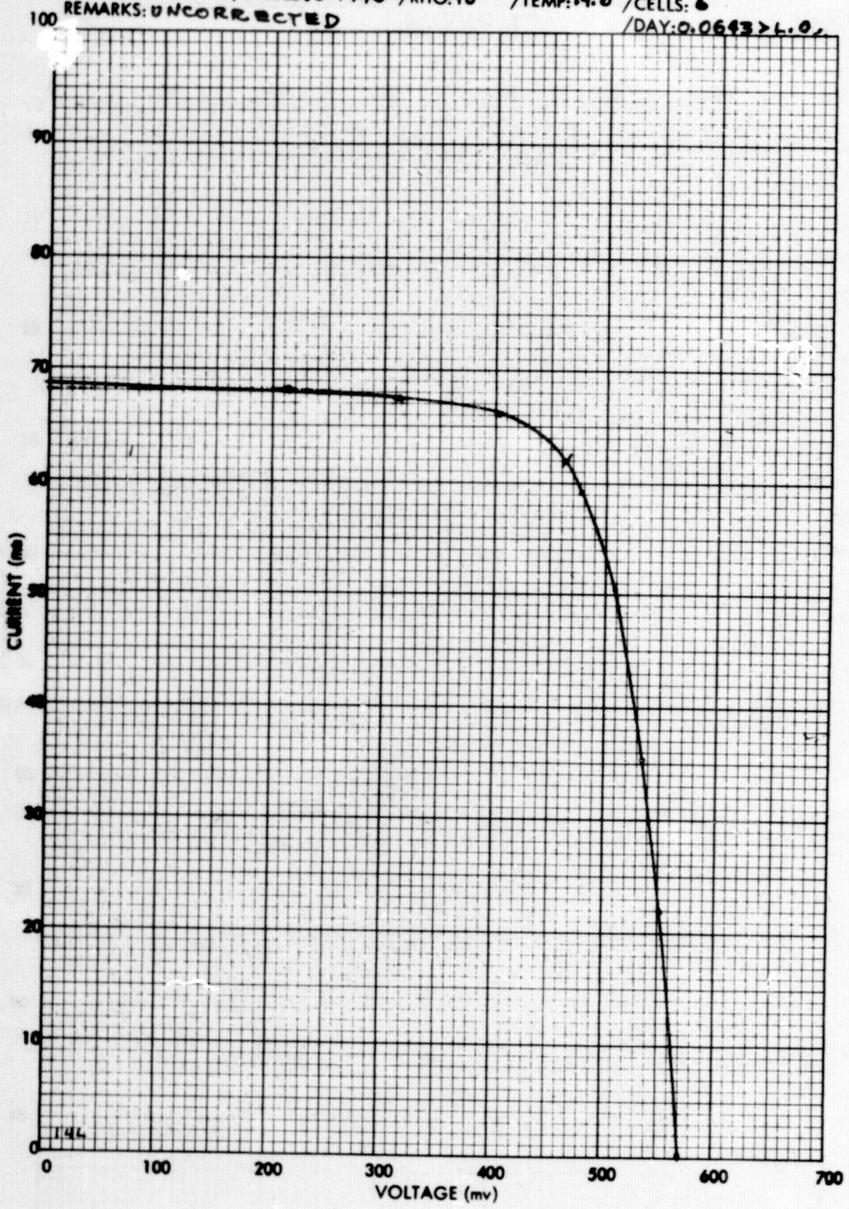


Figure 13. Cell 5, Days 100.6 and 416.8. Uncorrected Data



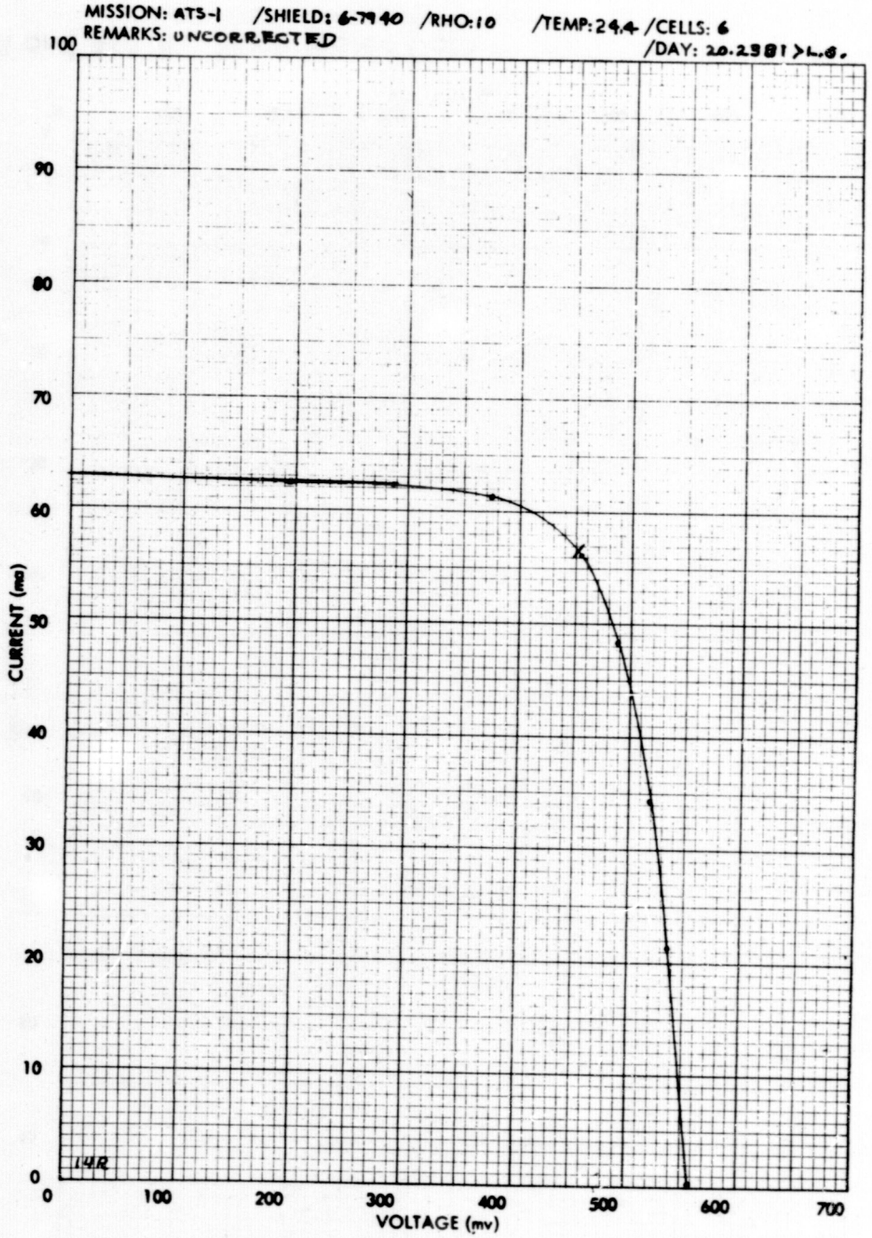
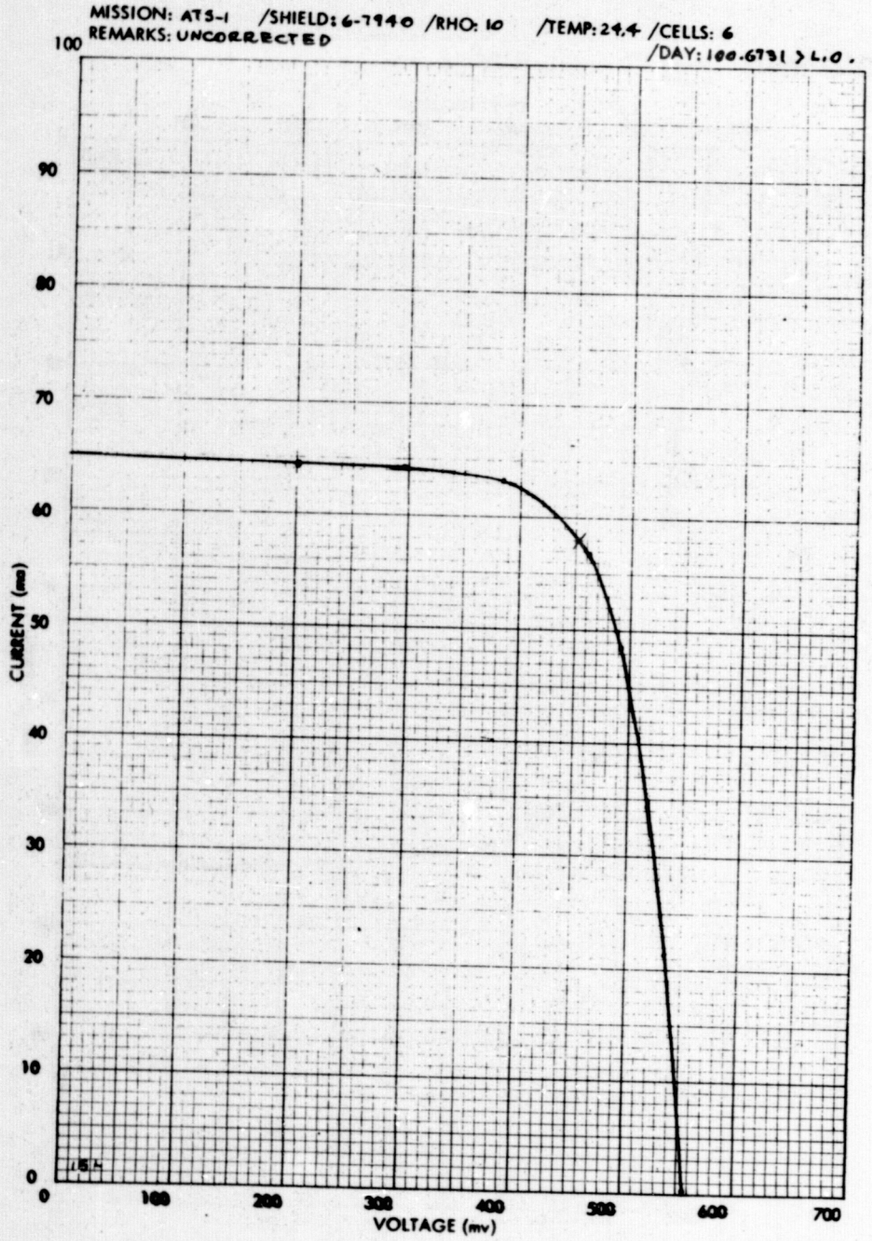


Figure 14. Cell 6, Days 0.064 and 20.3. Uncorrected Data



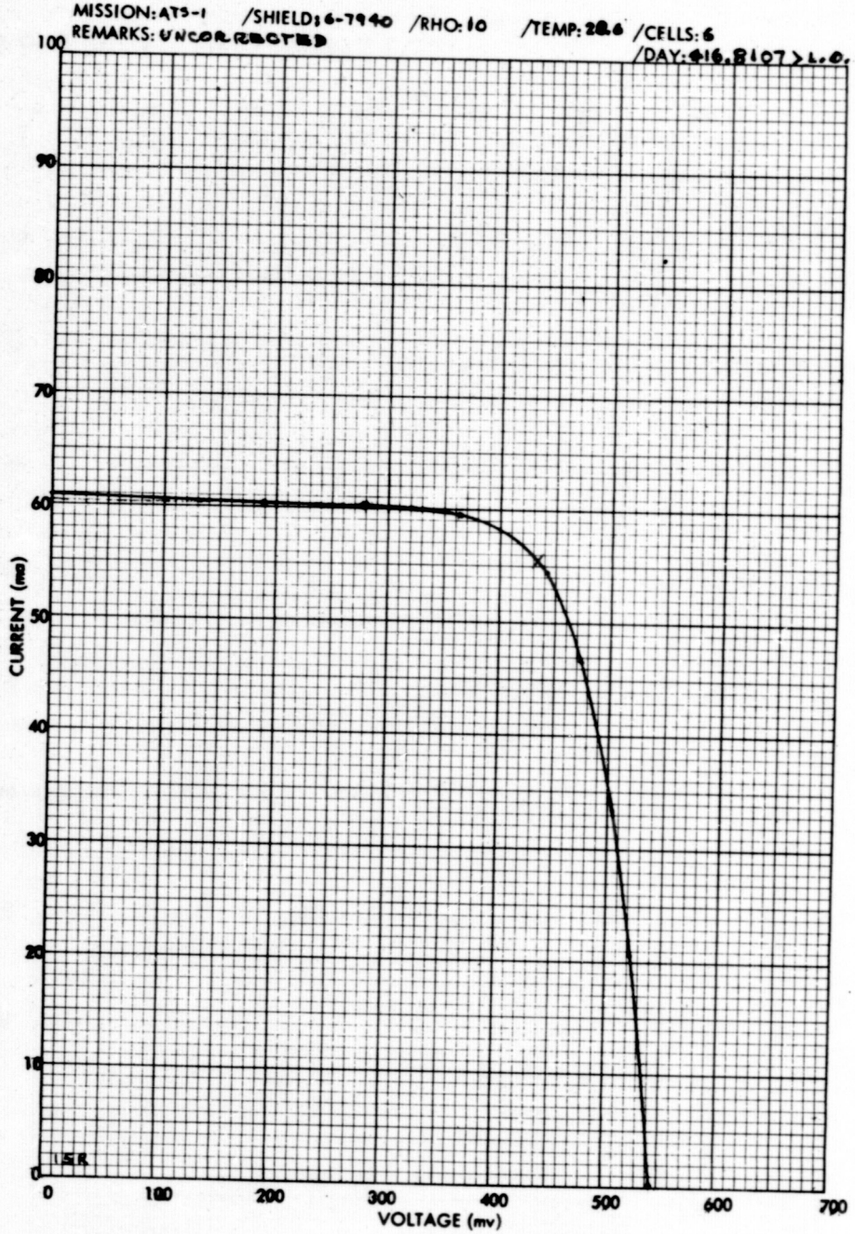
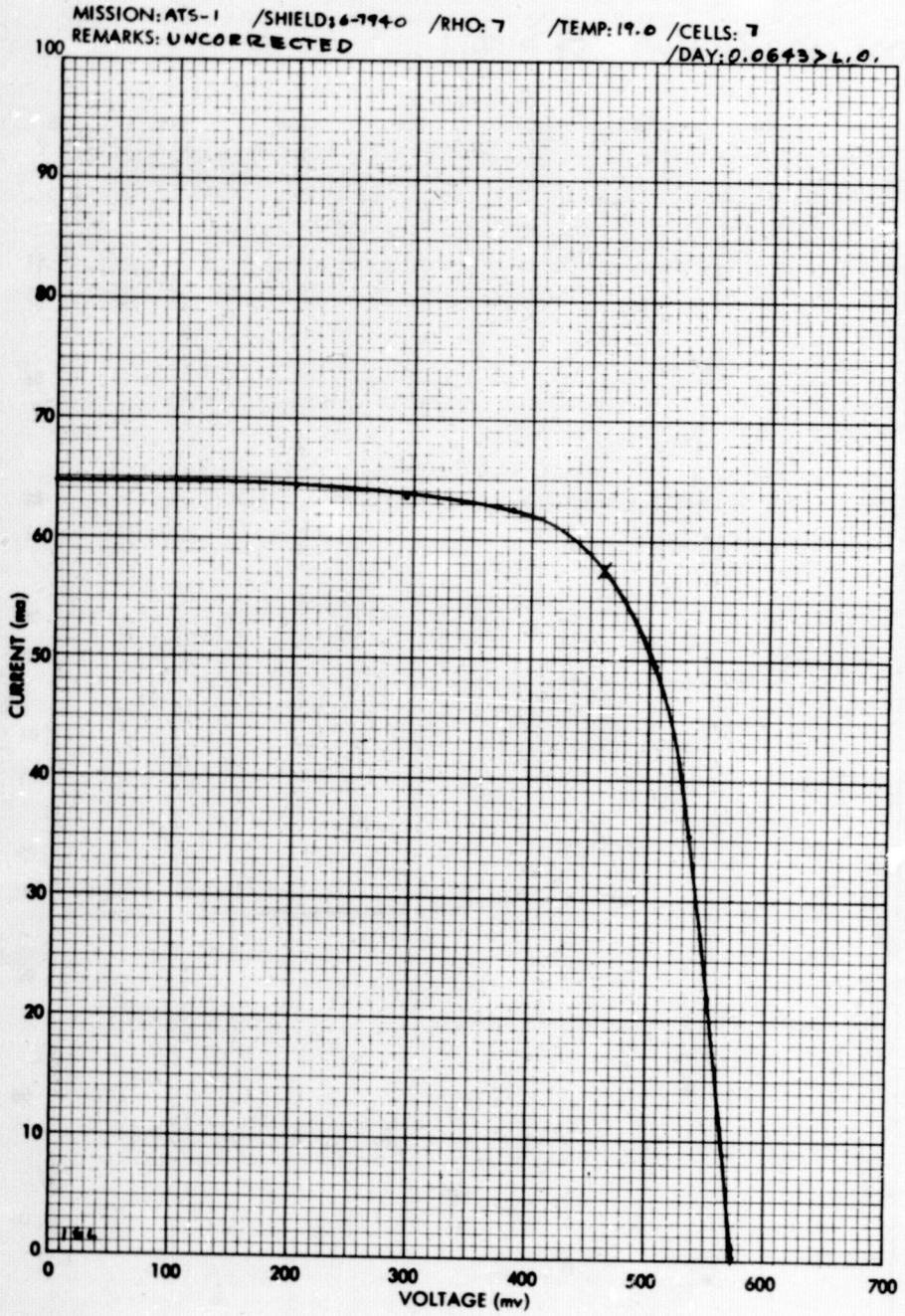


Figure 15. Cell 6, Days 100.6 and 416.8. Uncorrected Data



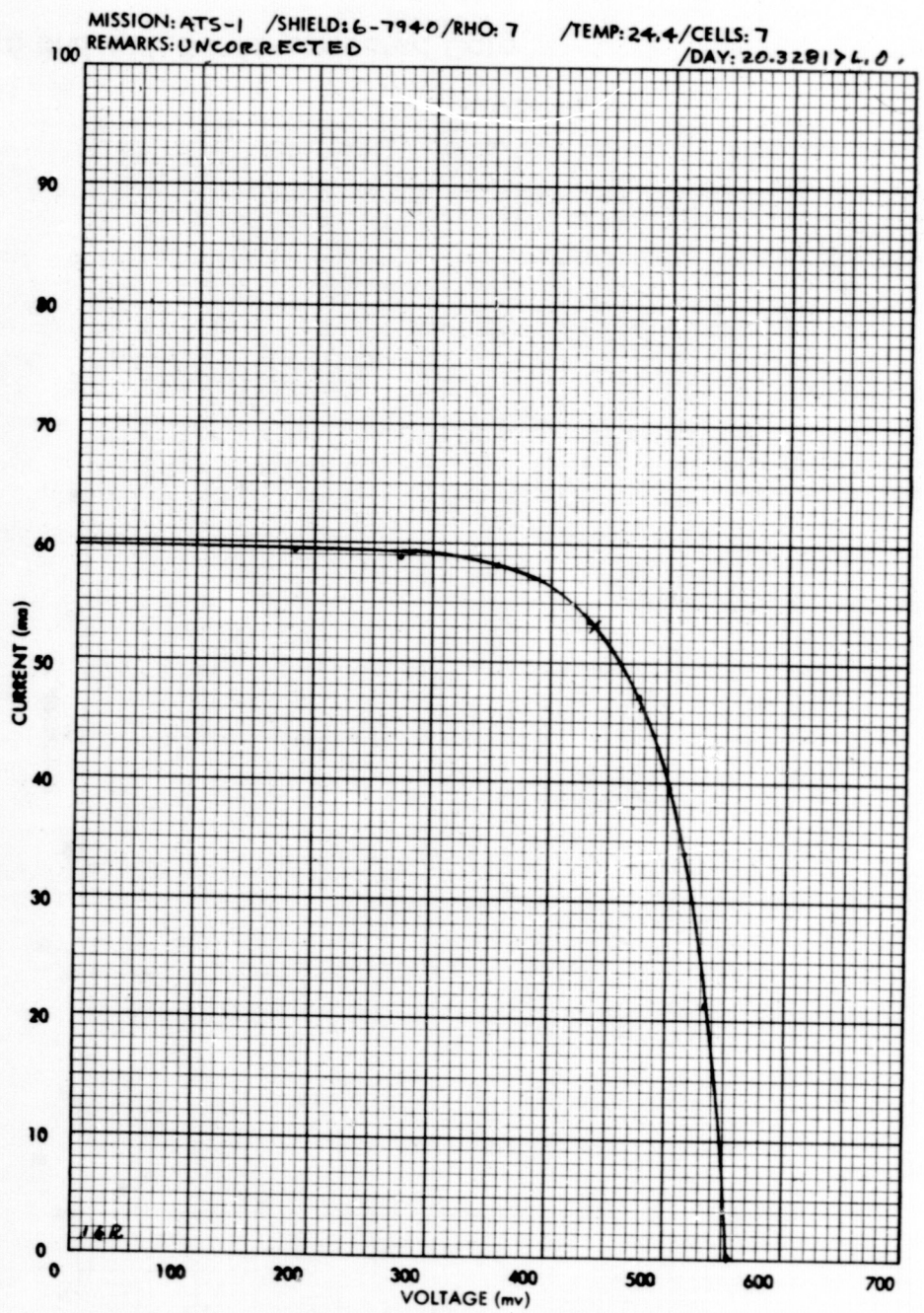
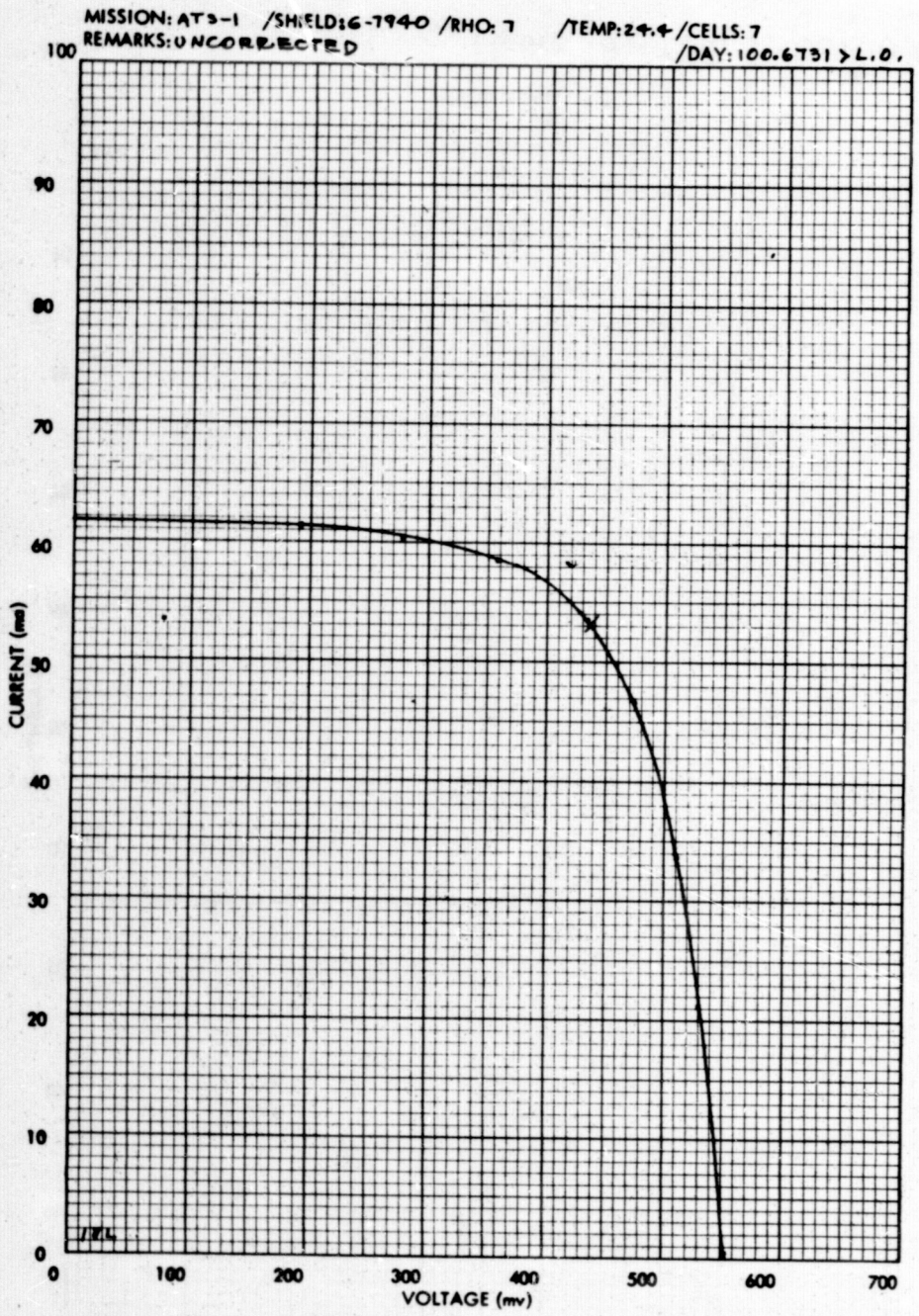


Figure 16. Cell 7, Days 0.064 and 20.3. Uncorrected Data



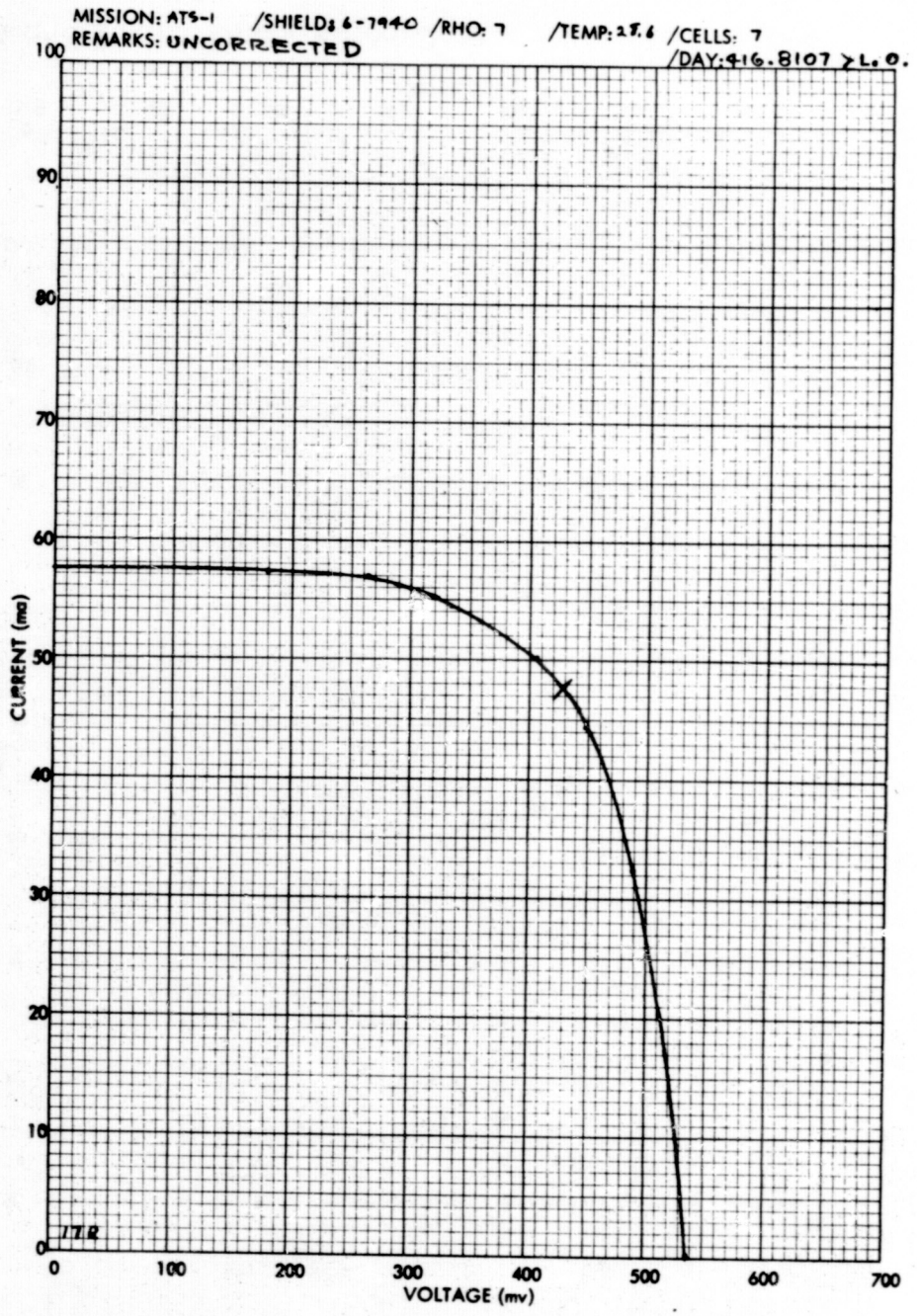
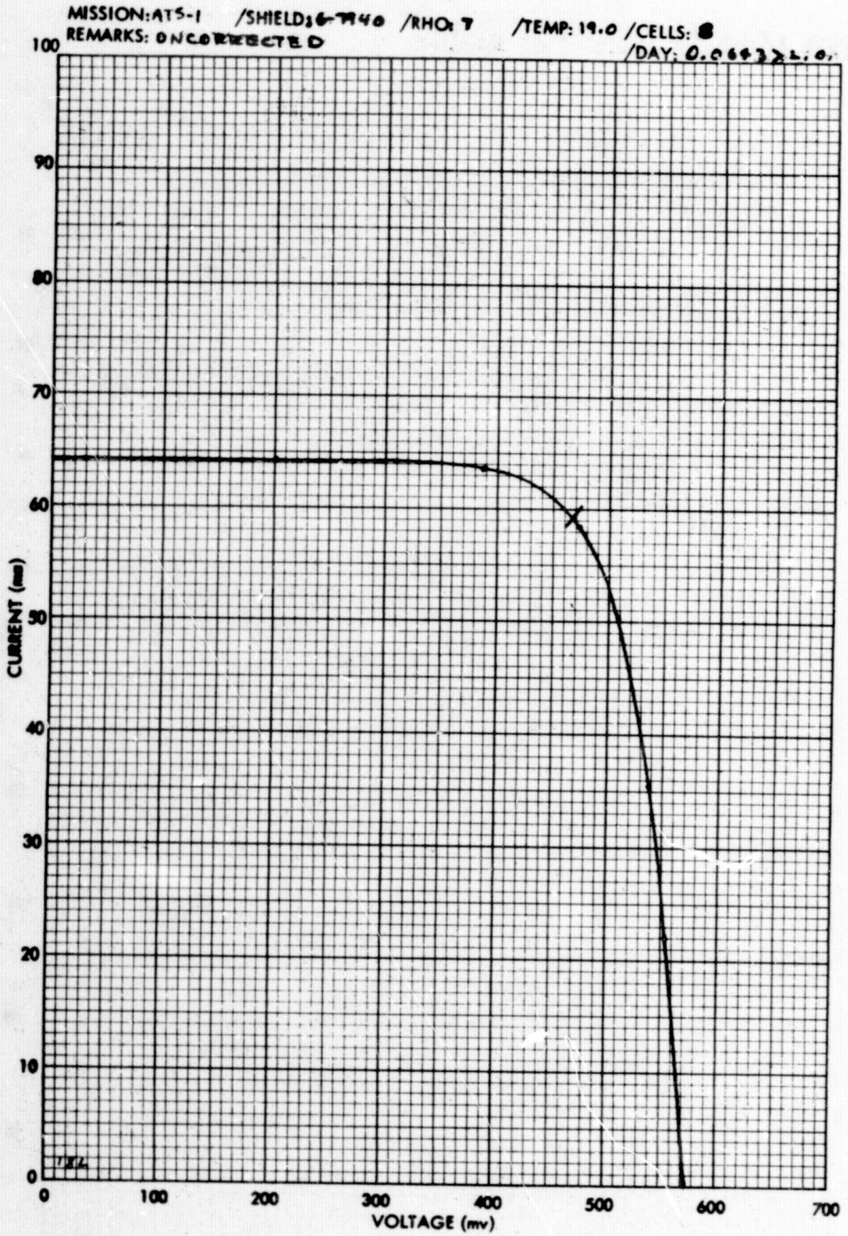


Figure 17. Cell 7, Days 100.6 and 416.8. Uncorrected Data



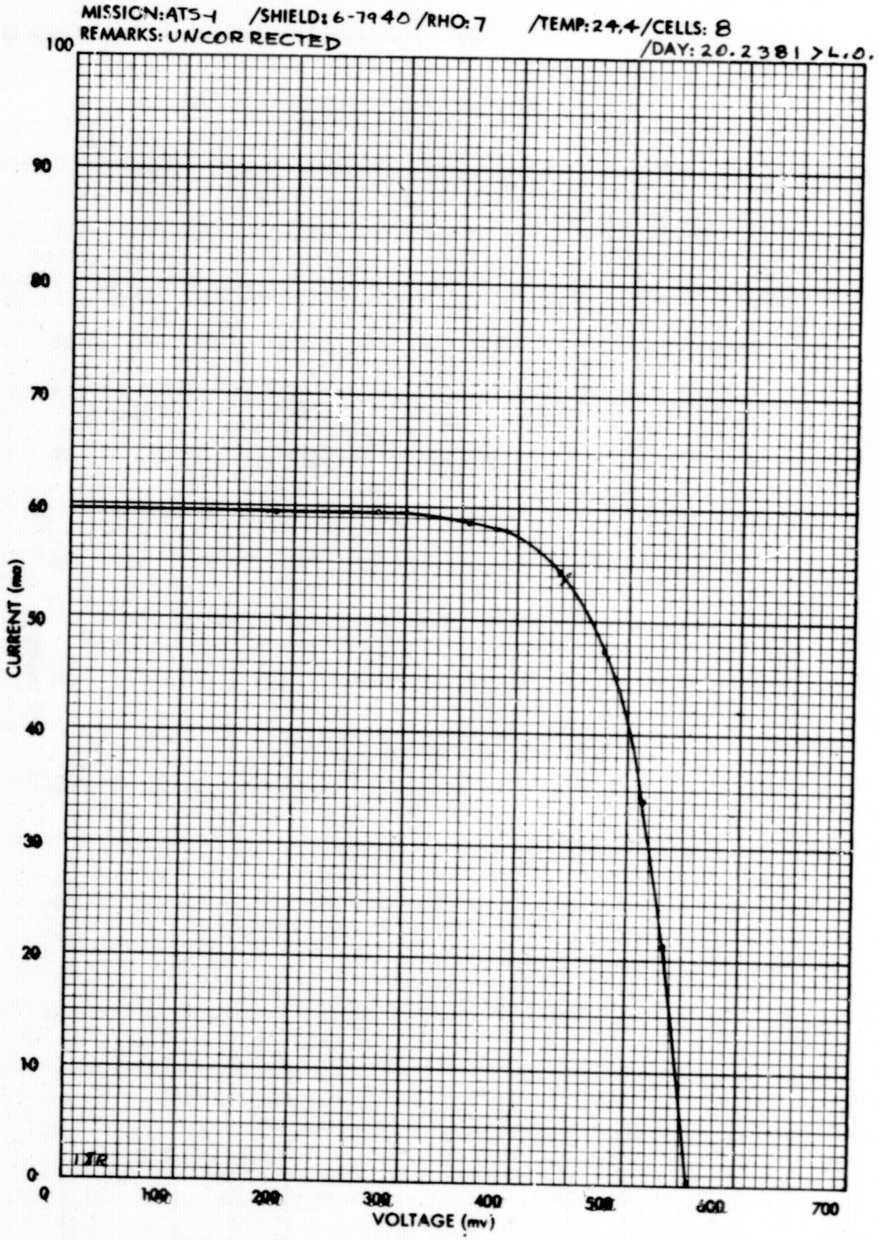
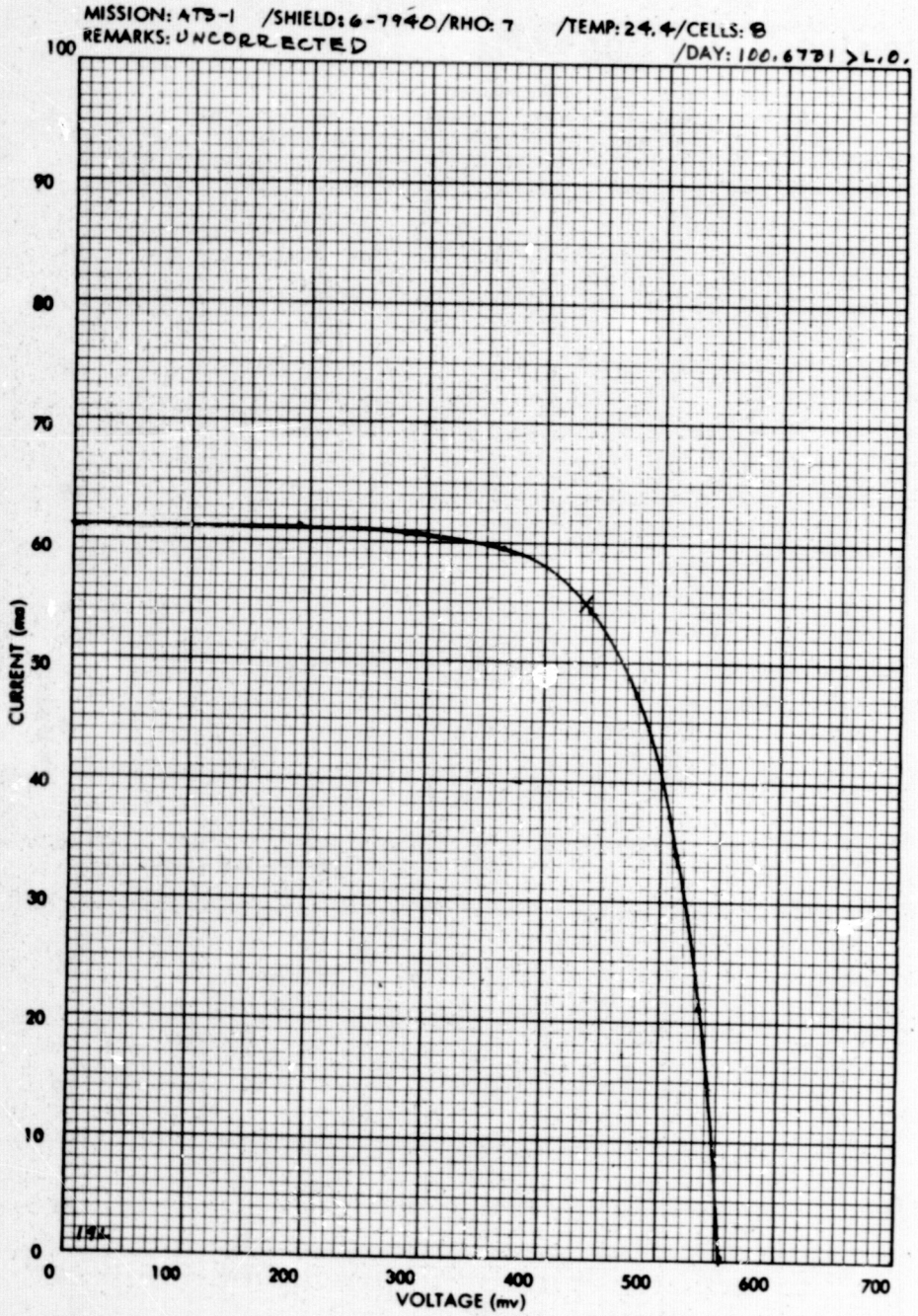


Figure 18. Cell 8, Days 0.064 and 20.3. Uncorrected Data



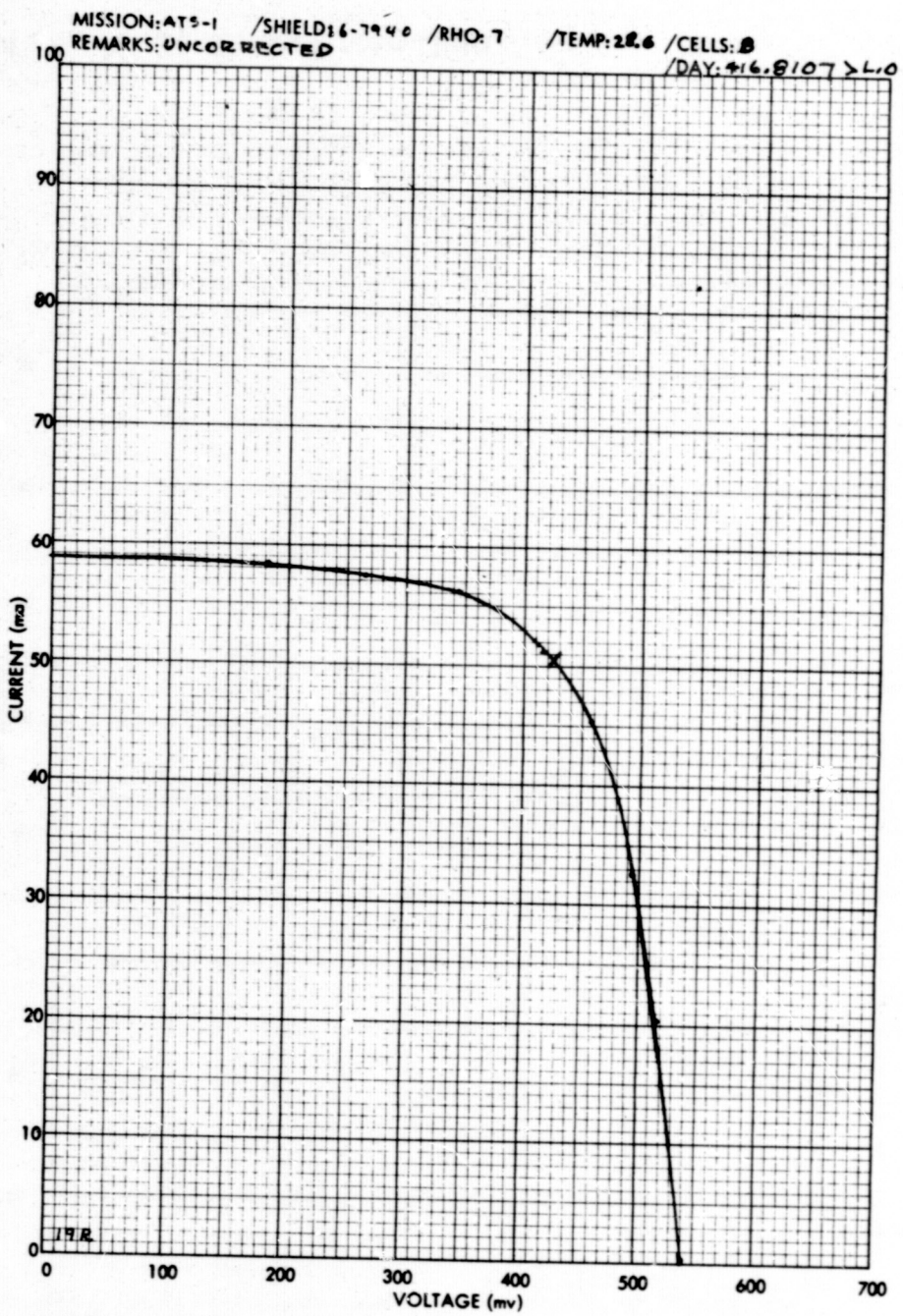
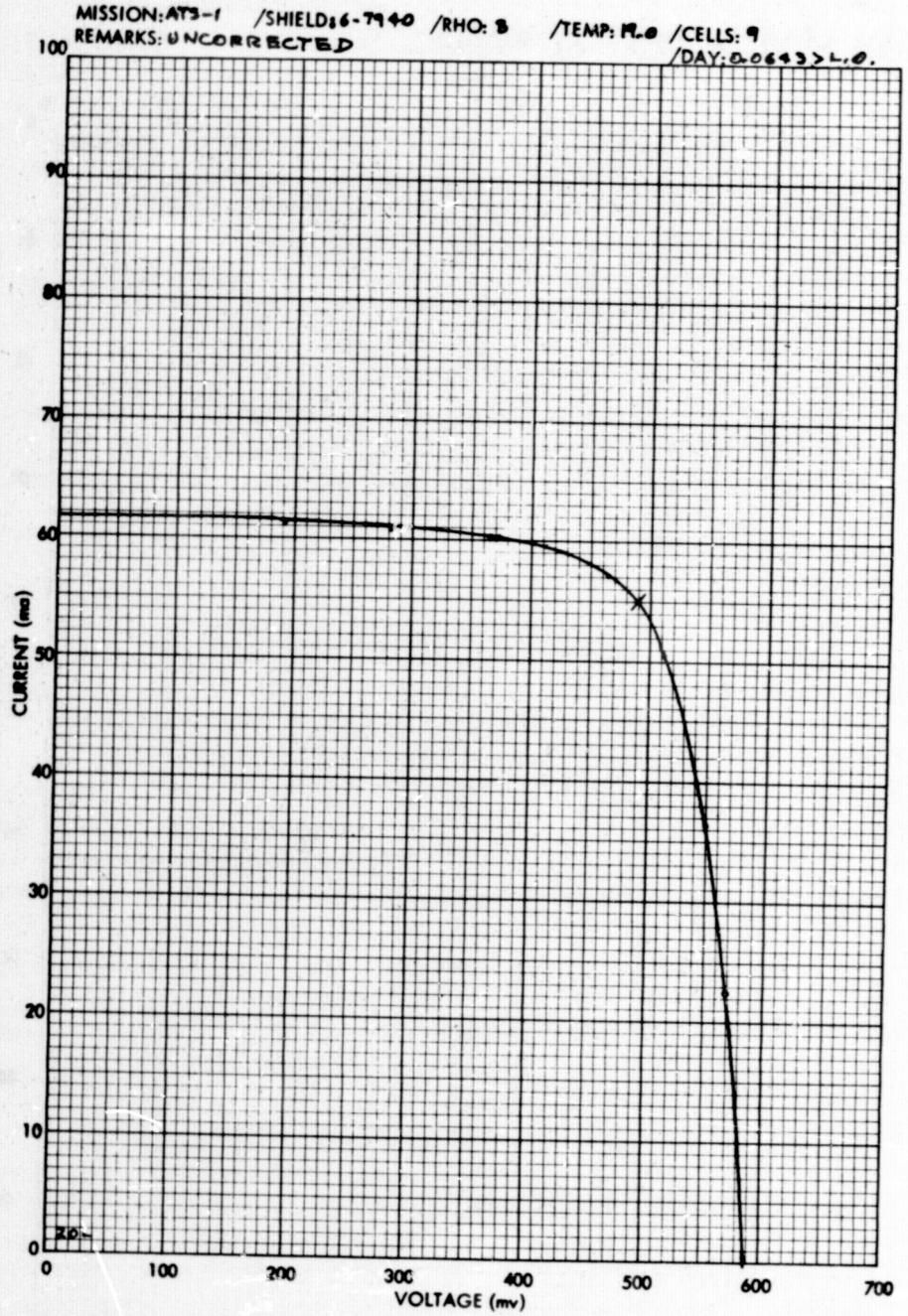


Figure 19. Cell 8, Days 100.6 and 416.8. Uncorrected Data



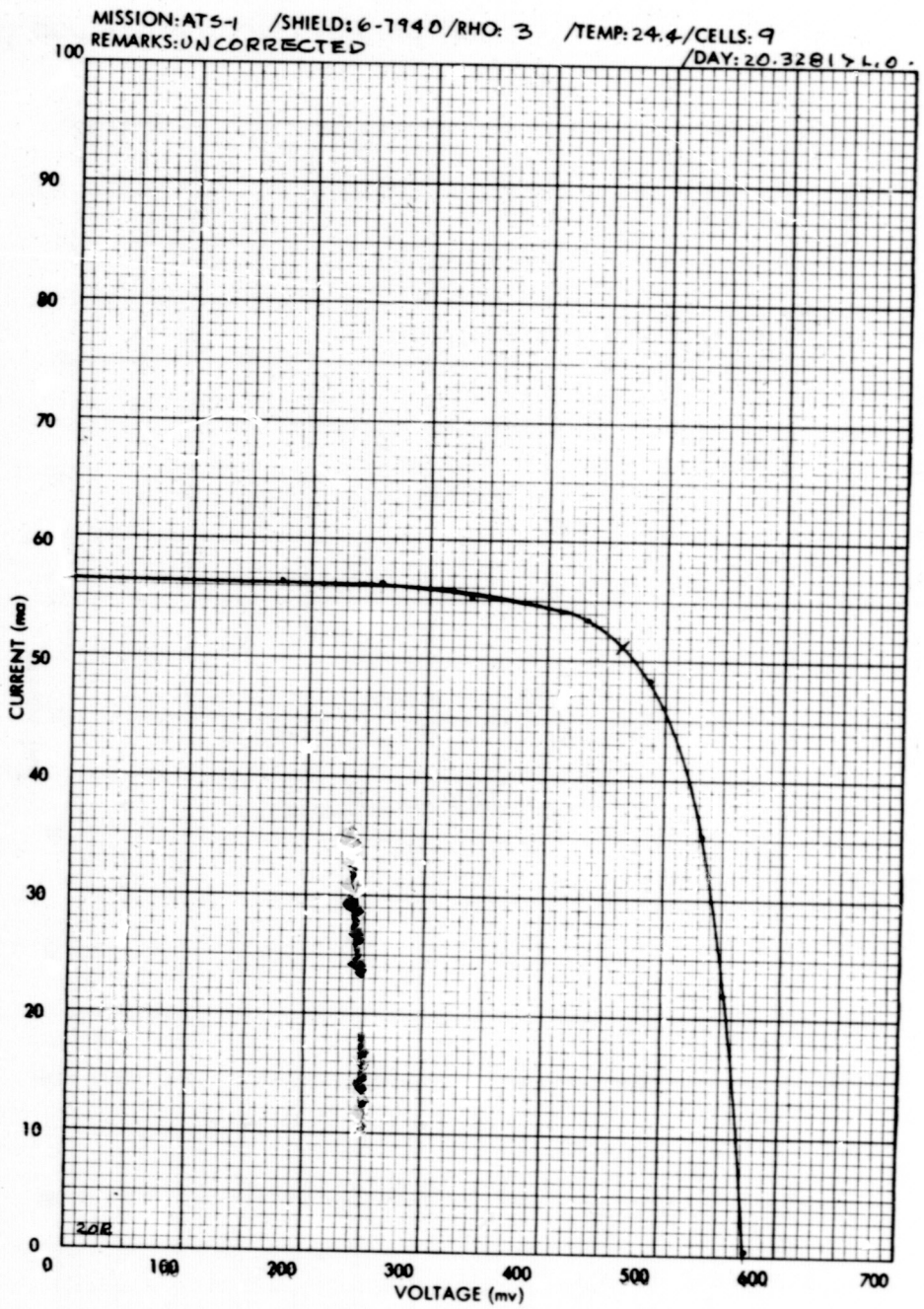
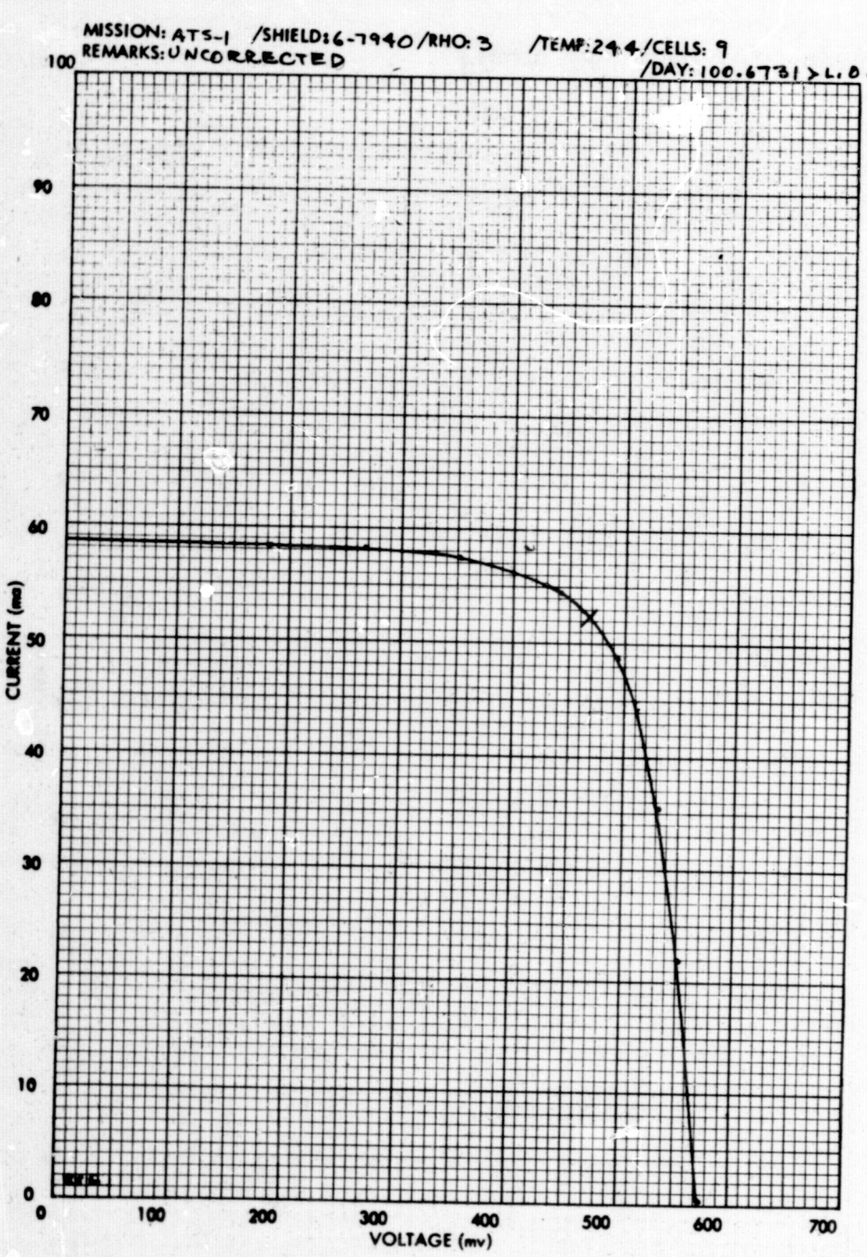


Figure 20. Cell 9, Days 0.064 and 20.3. Uncorrected Data



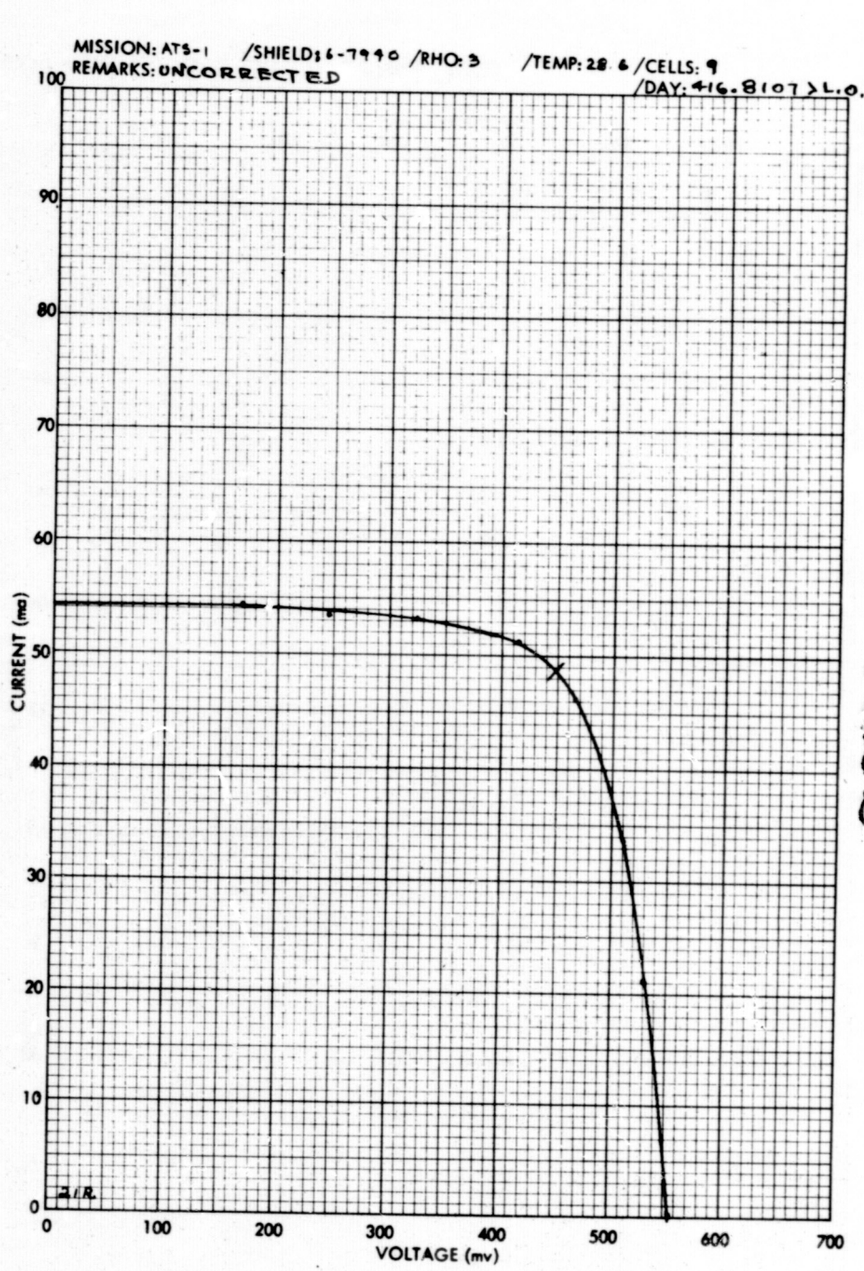
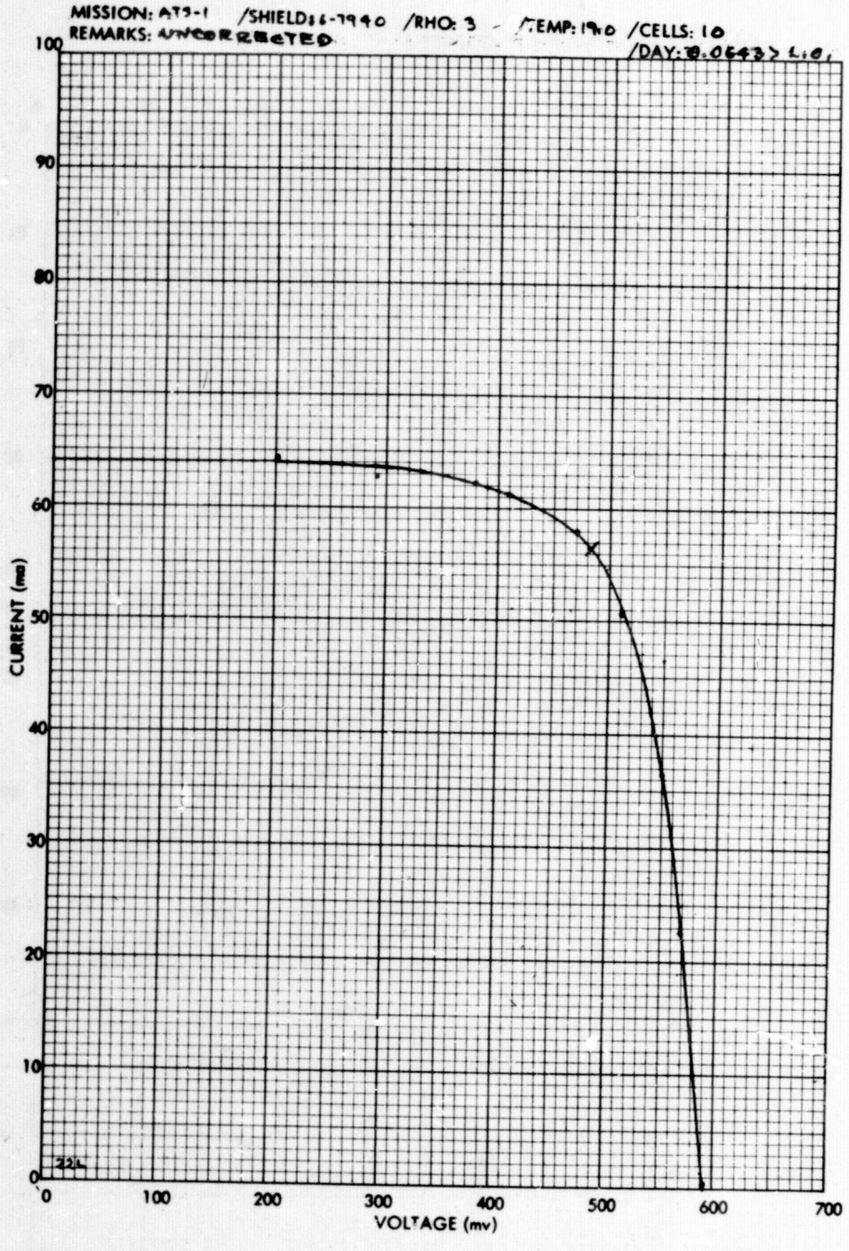


Figure 21. Cell 9, Days 100.6 and 416.8. Uncorrected Data



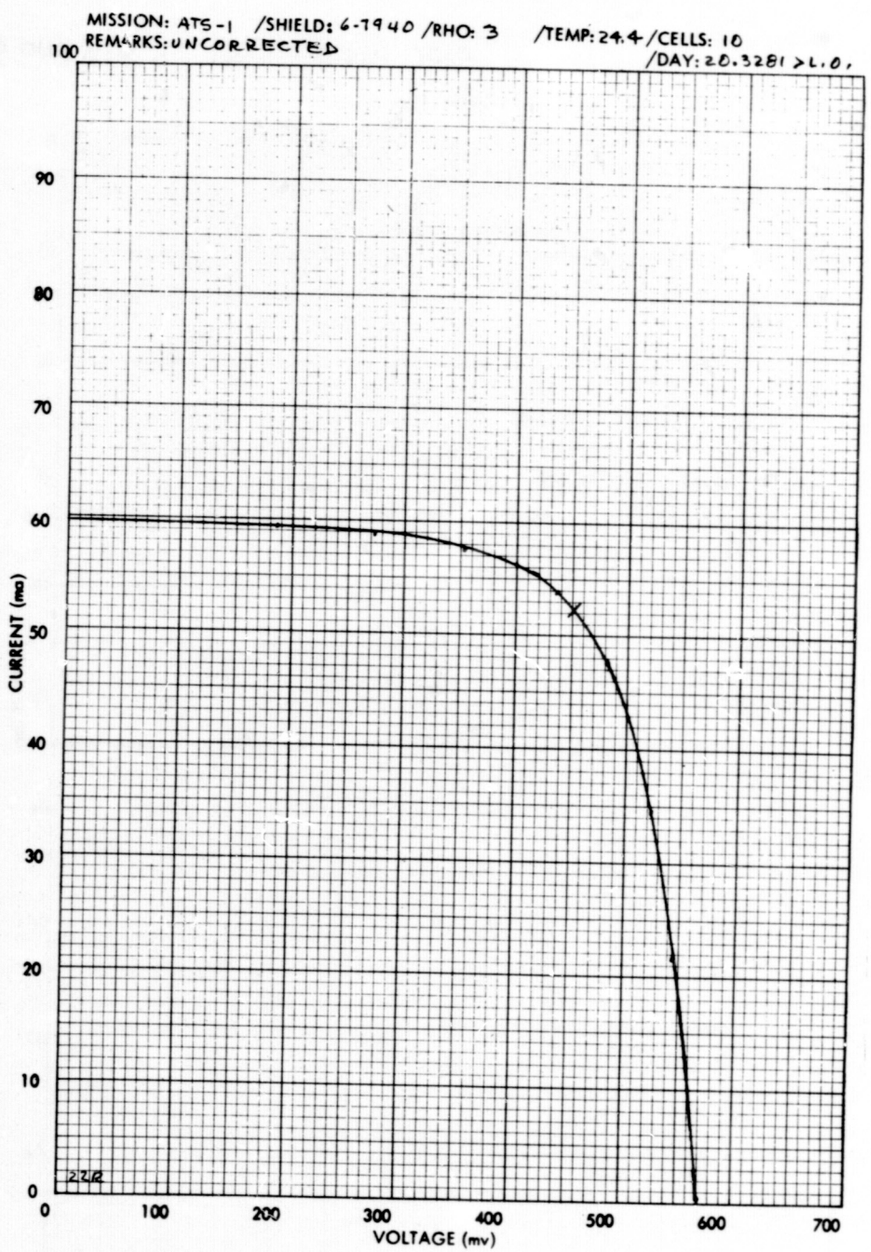
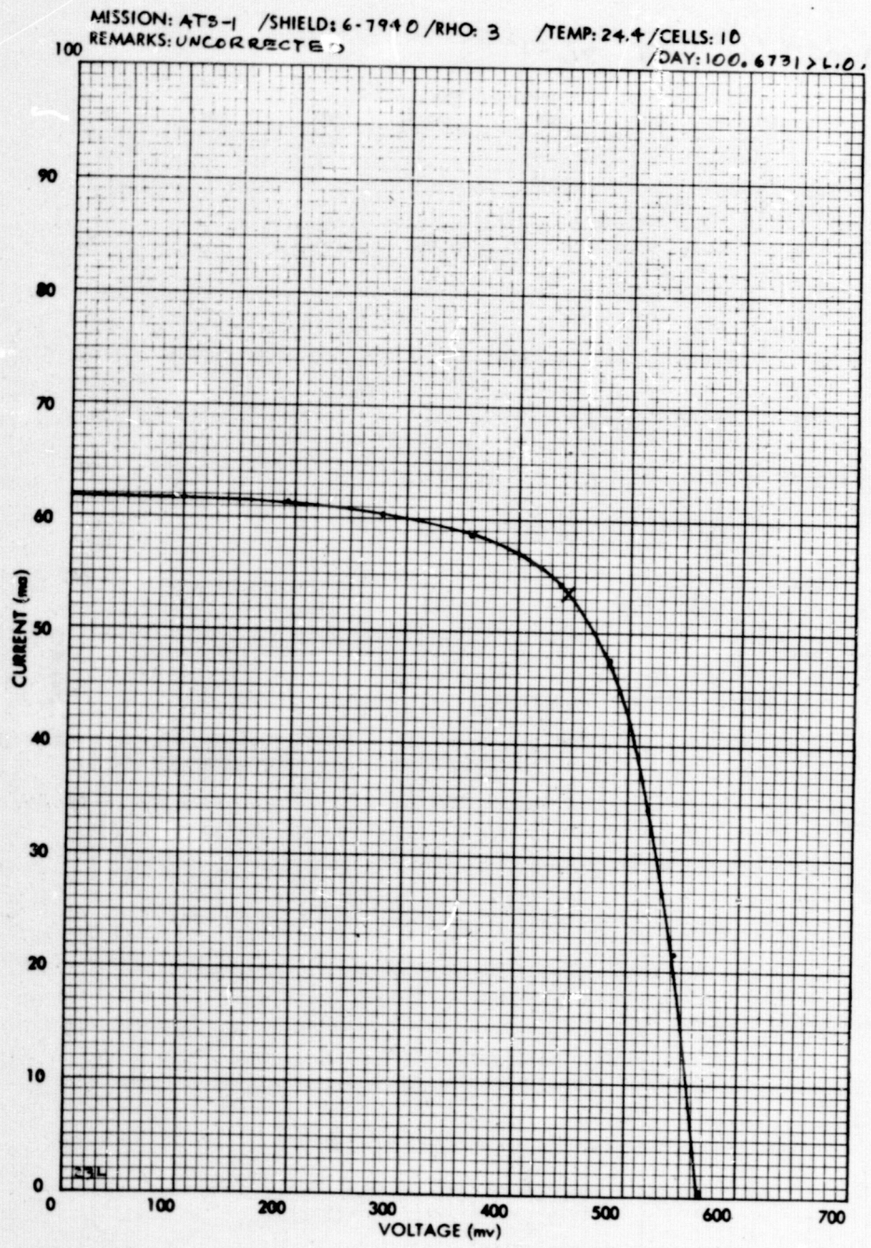


Figure 22. Cell 10, Days 0.064 and 20.3. Uncorrected Data



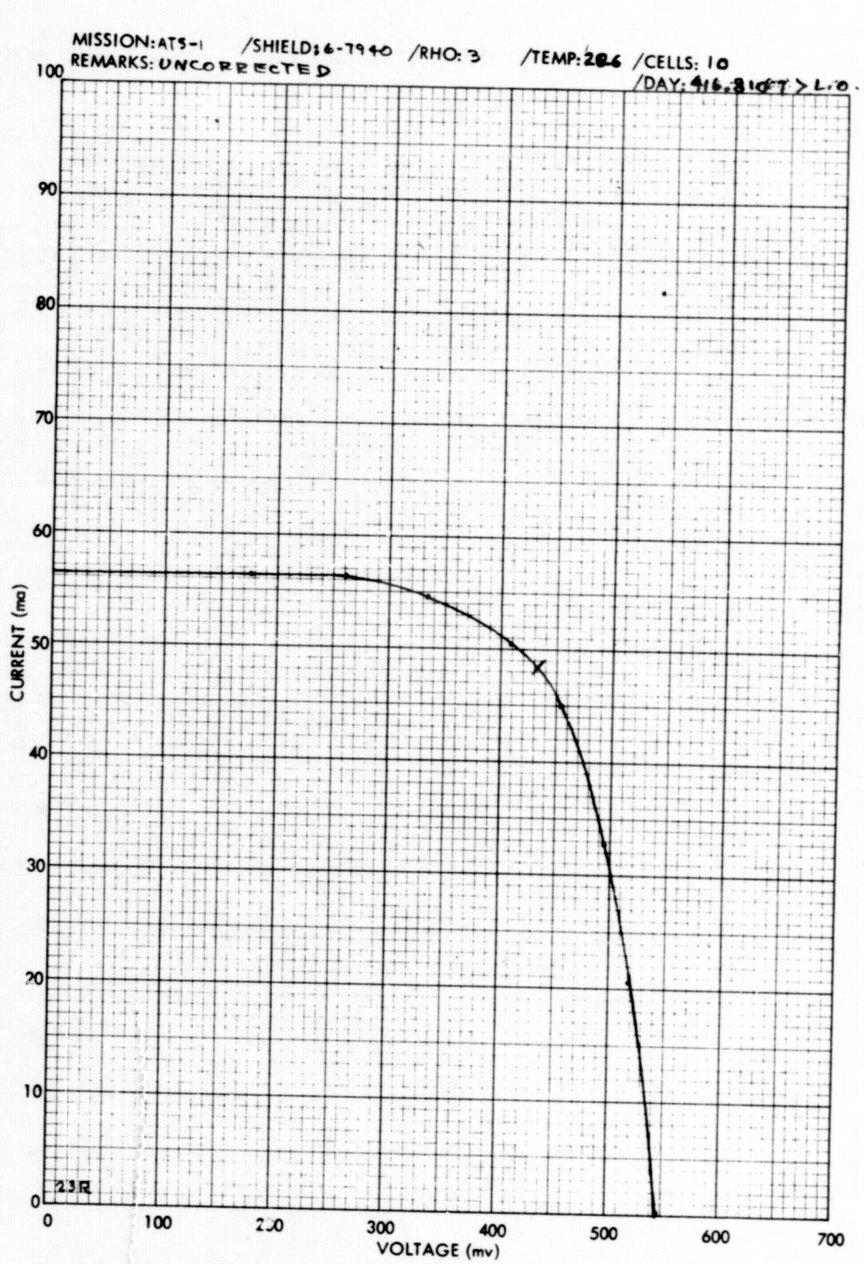
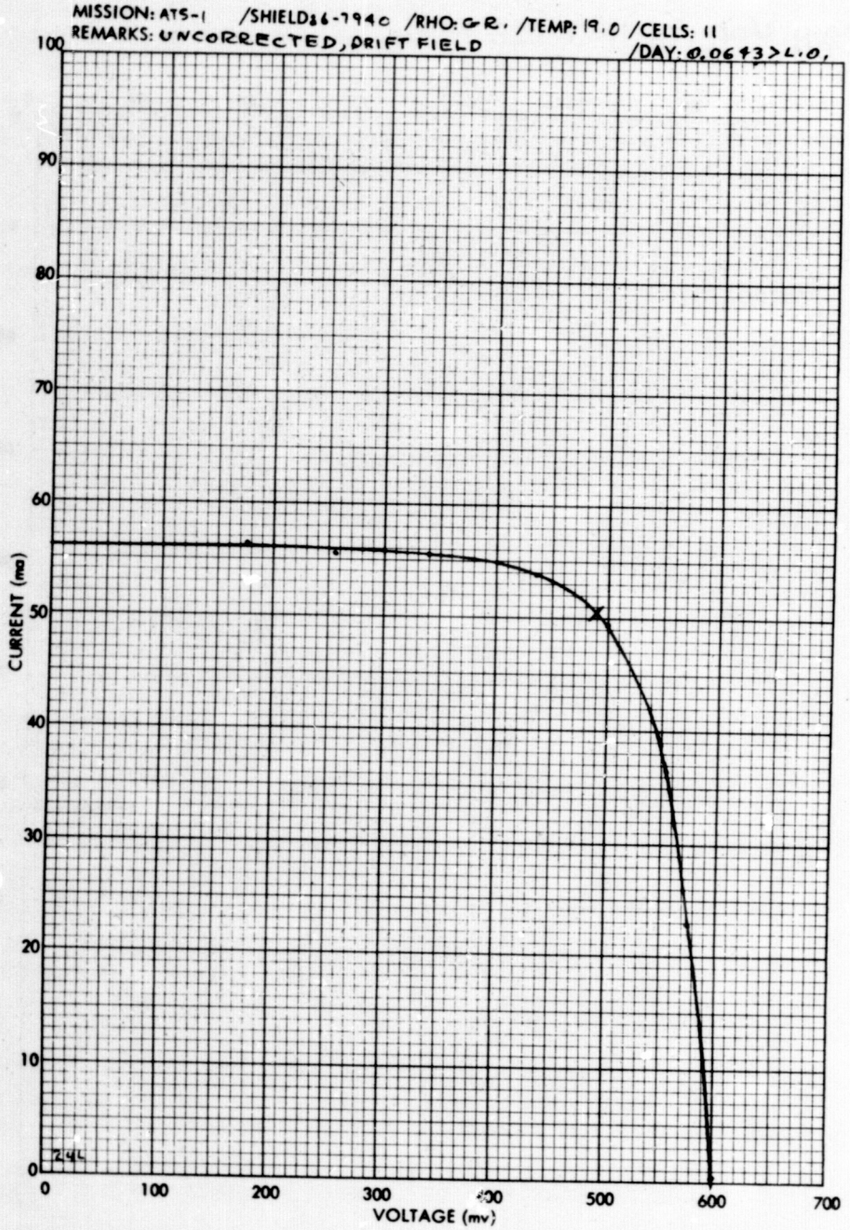


Figure 23. Cell 10, Days 100.6 and 416.8. Uncorrected Data



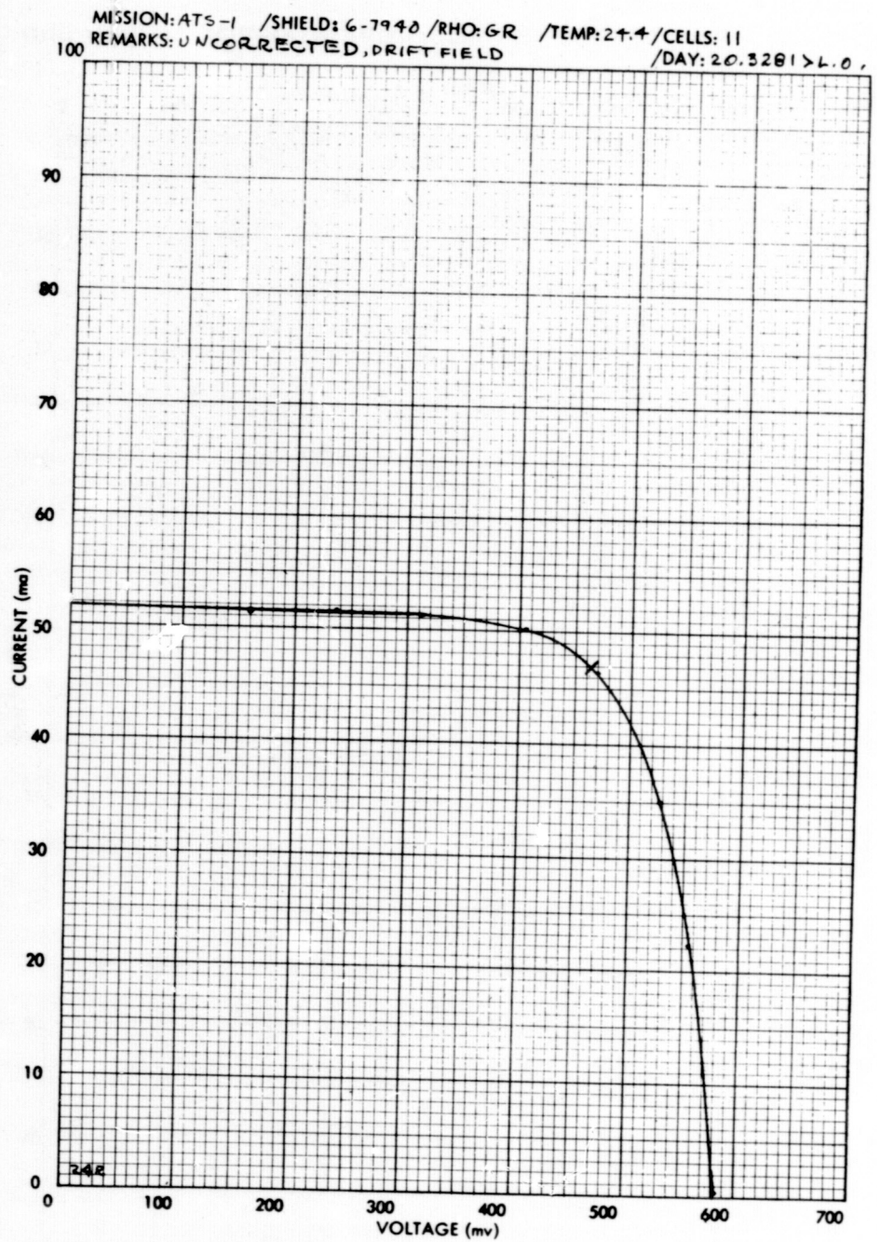
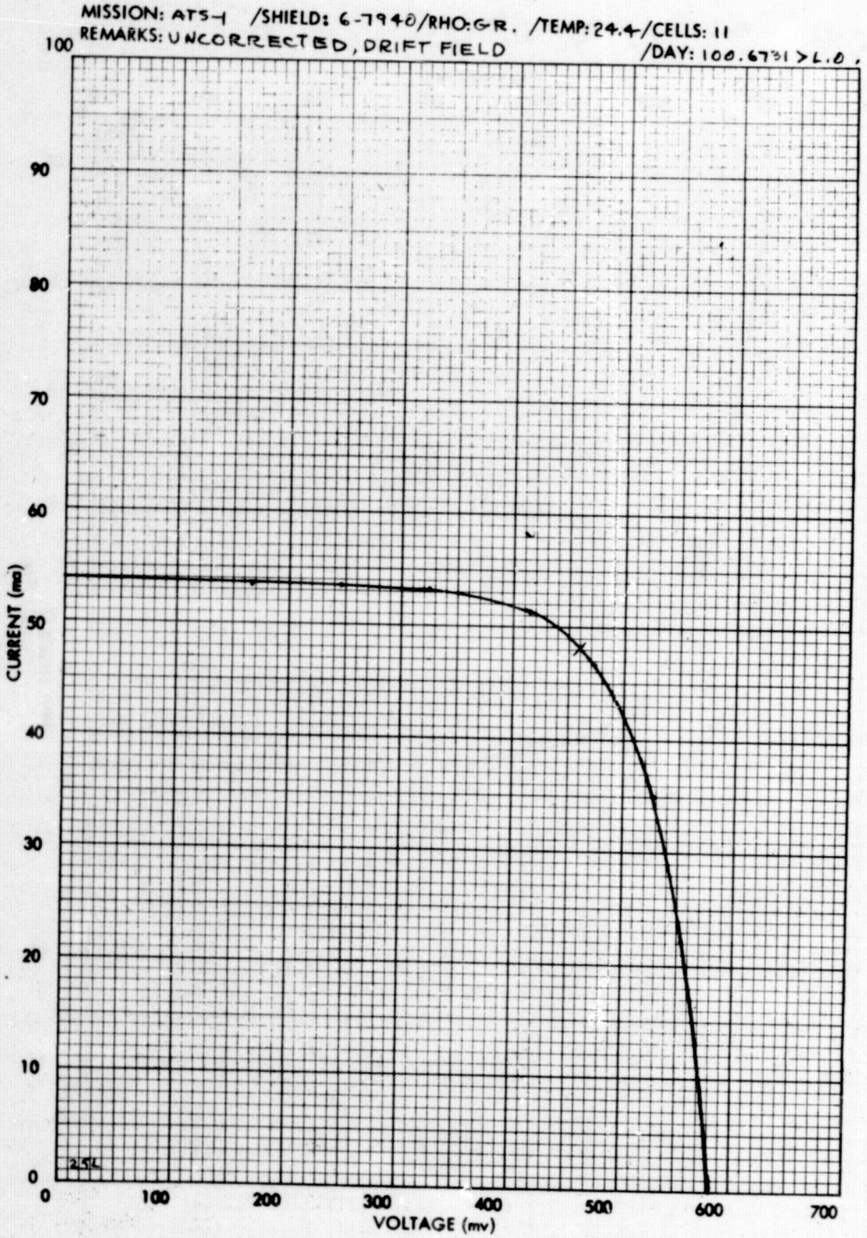


Figure 24. Cell 11, Days 0.064 and 20.3. Uncorrected Data



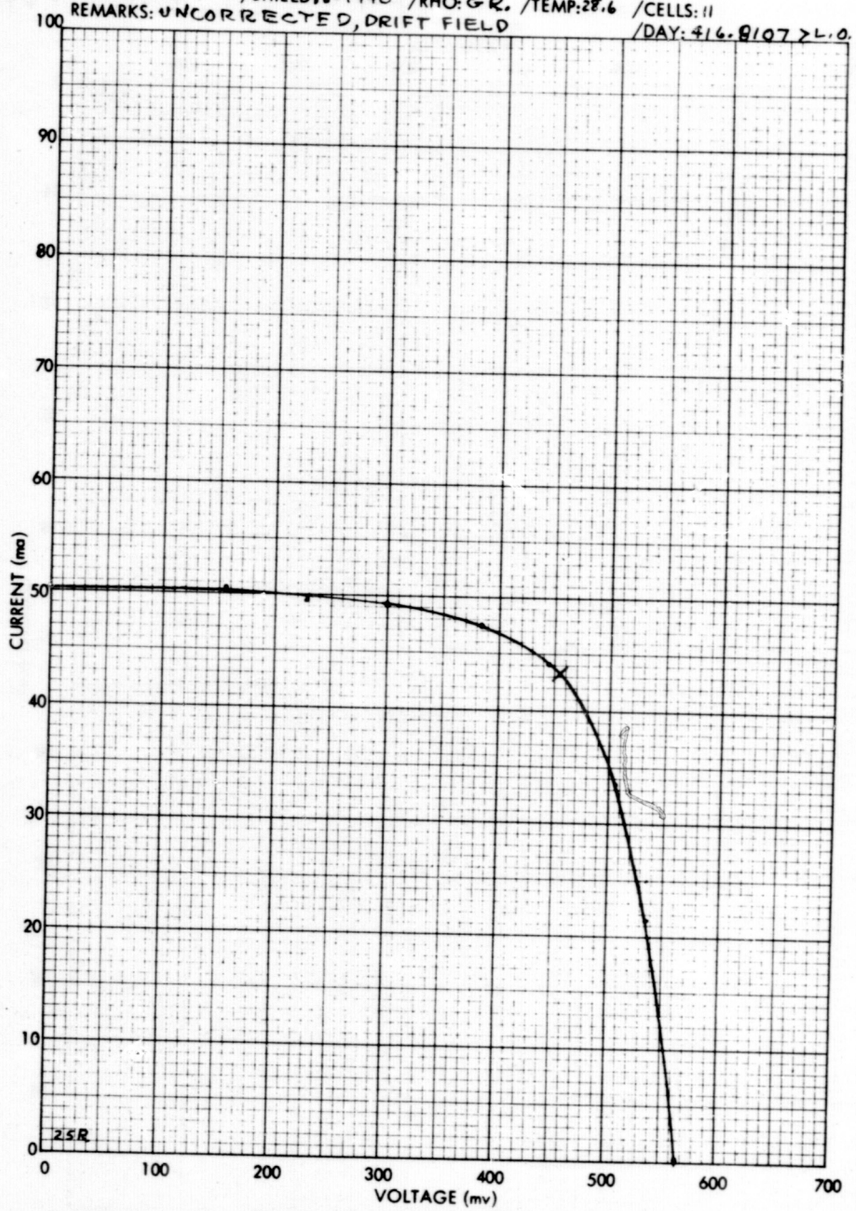


Figure 25. Cell 11, Days 100.6 and 416.8. Uncorrected Data

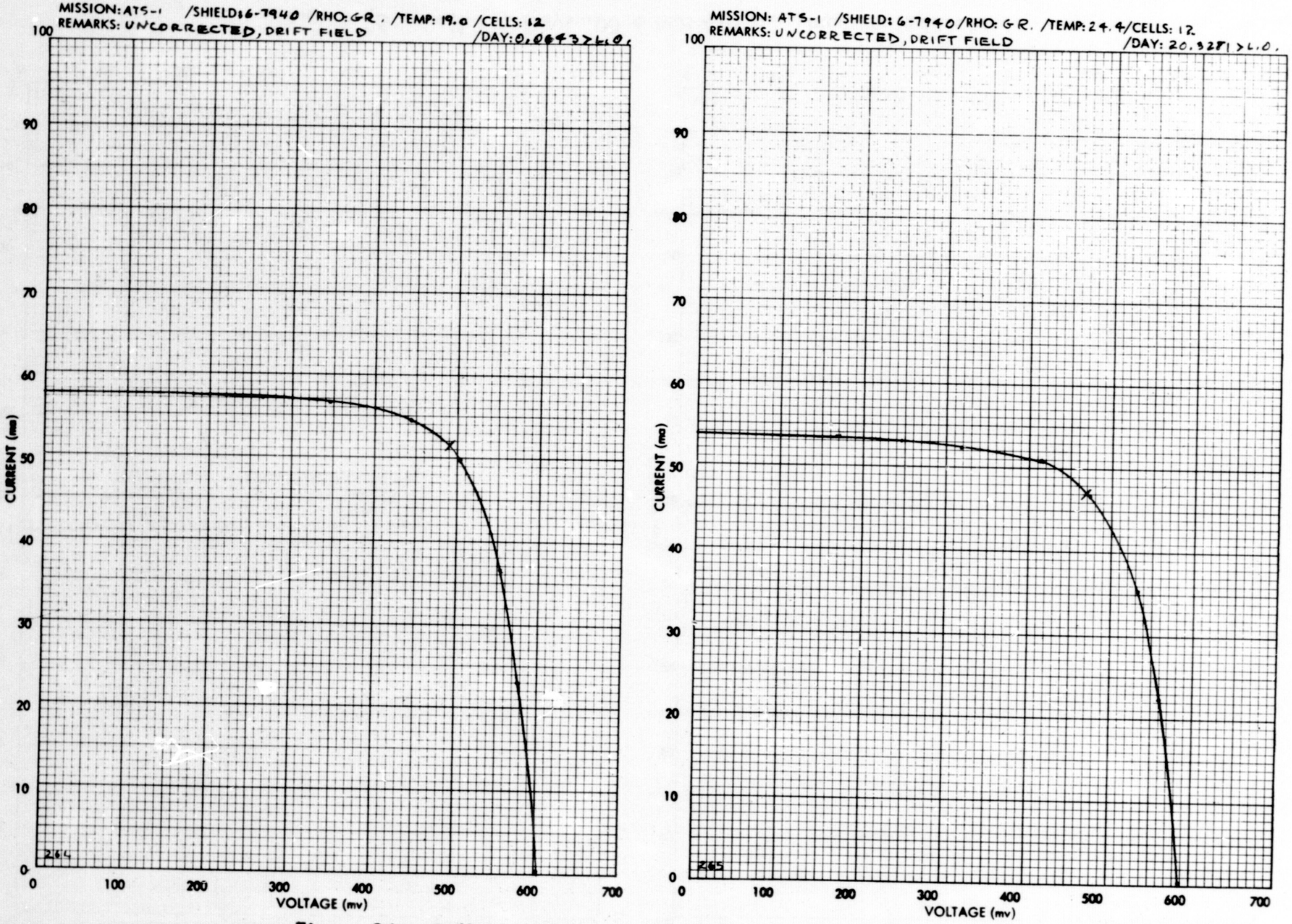
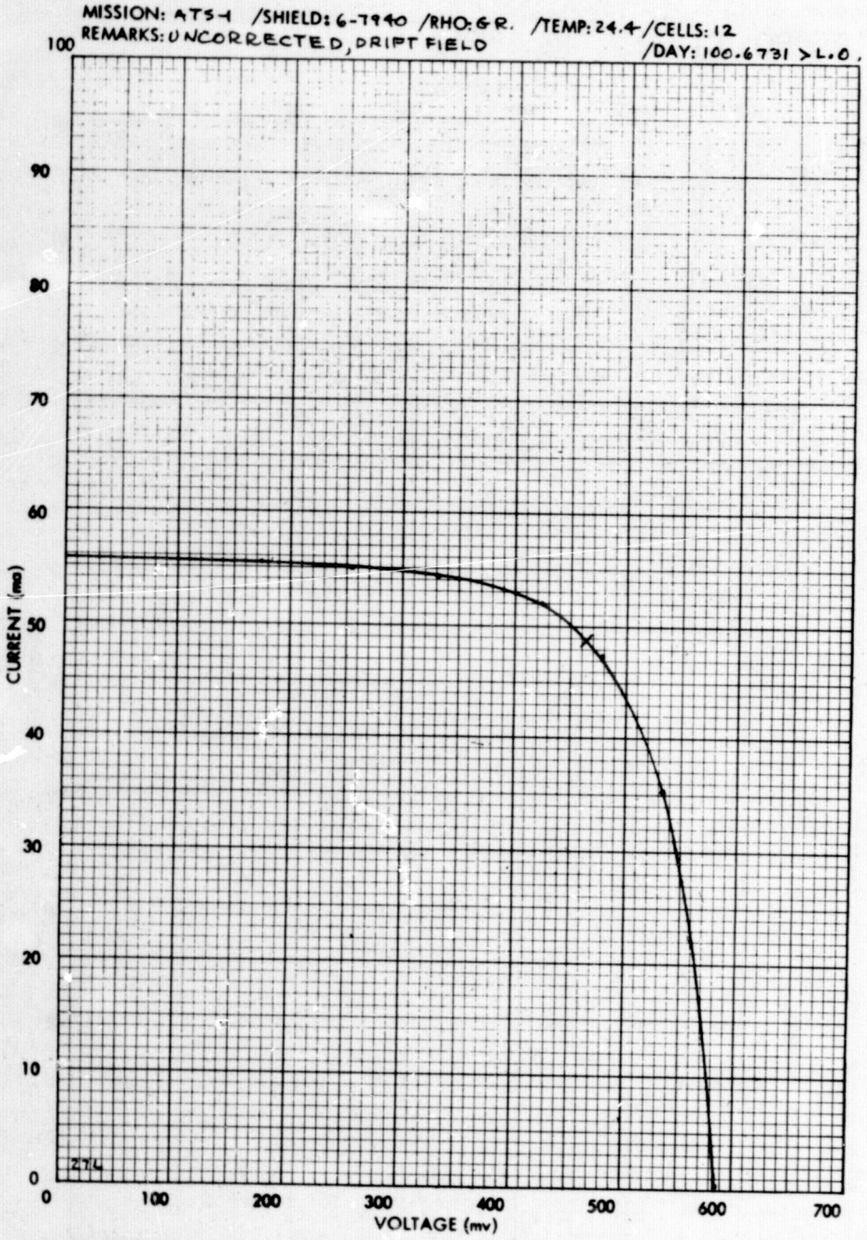


Figure 26. Cell 12, Days 0.064 and 20.3. Uncorrected Data



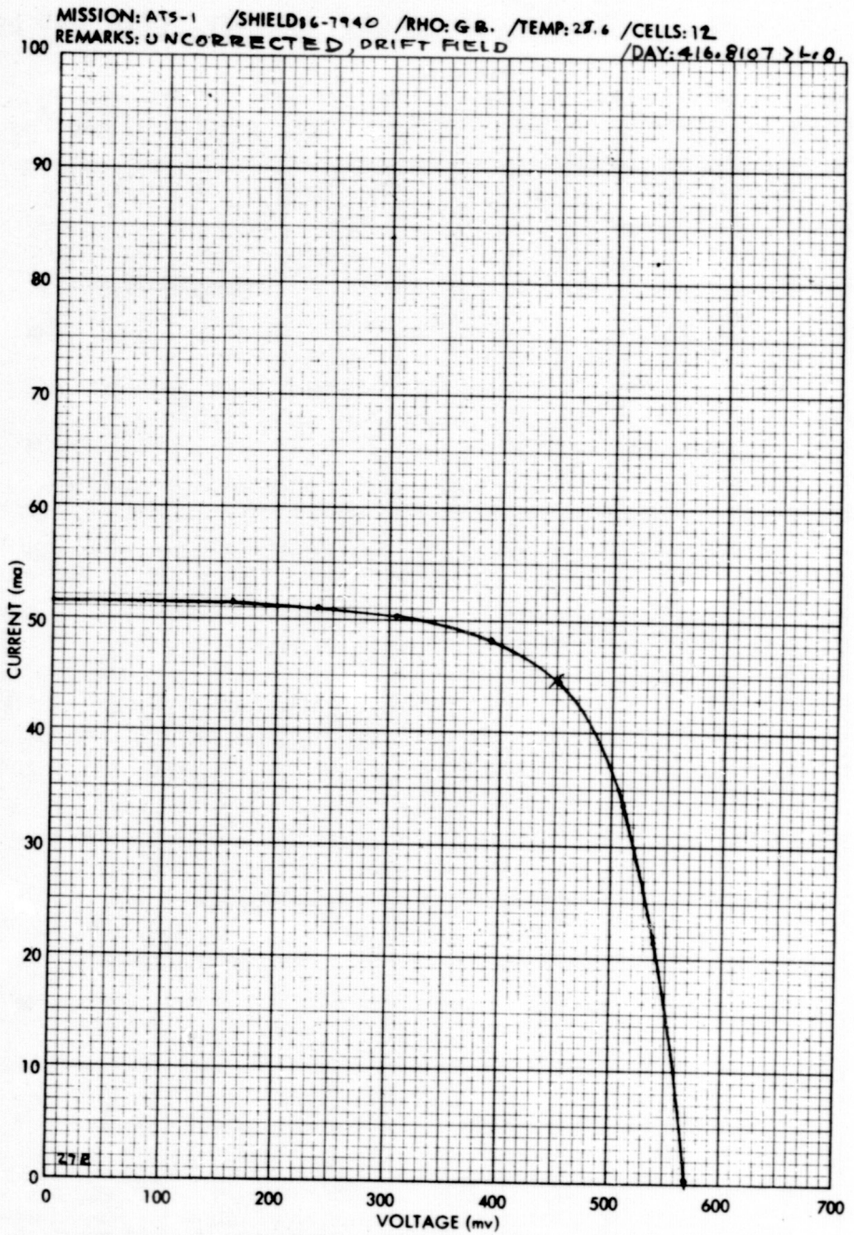
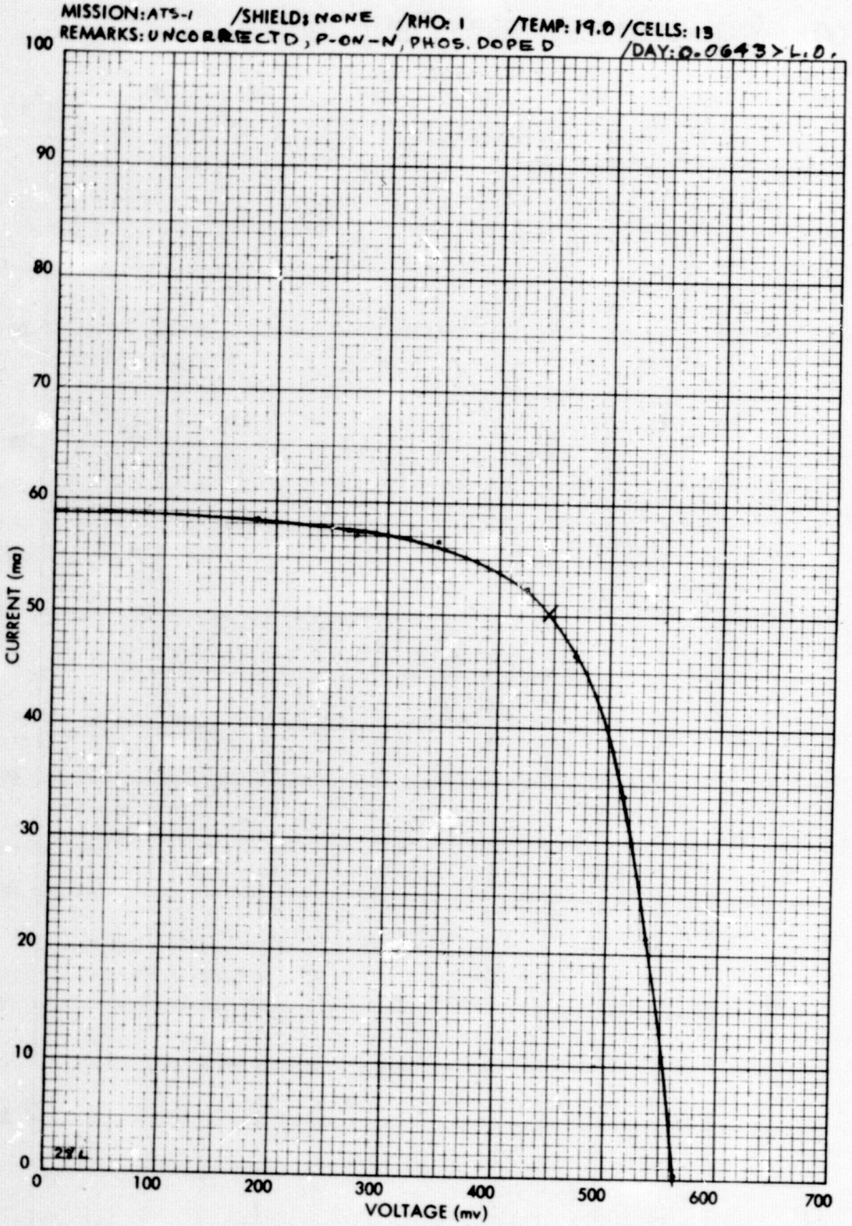


Figure 27. Cell 12, Days 100.6 and 416.8. Uncorrected Data



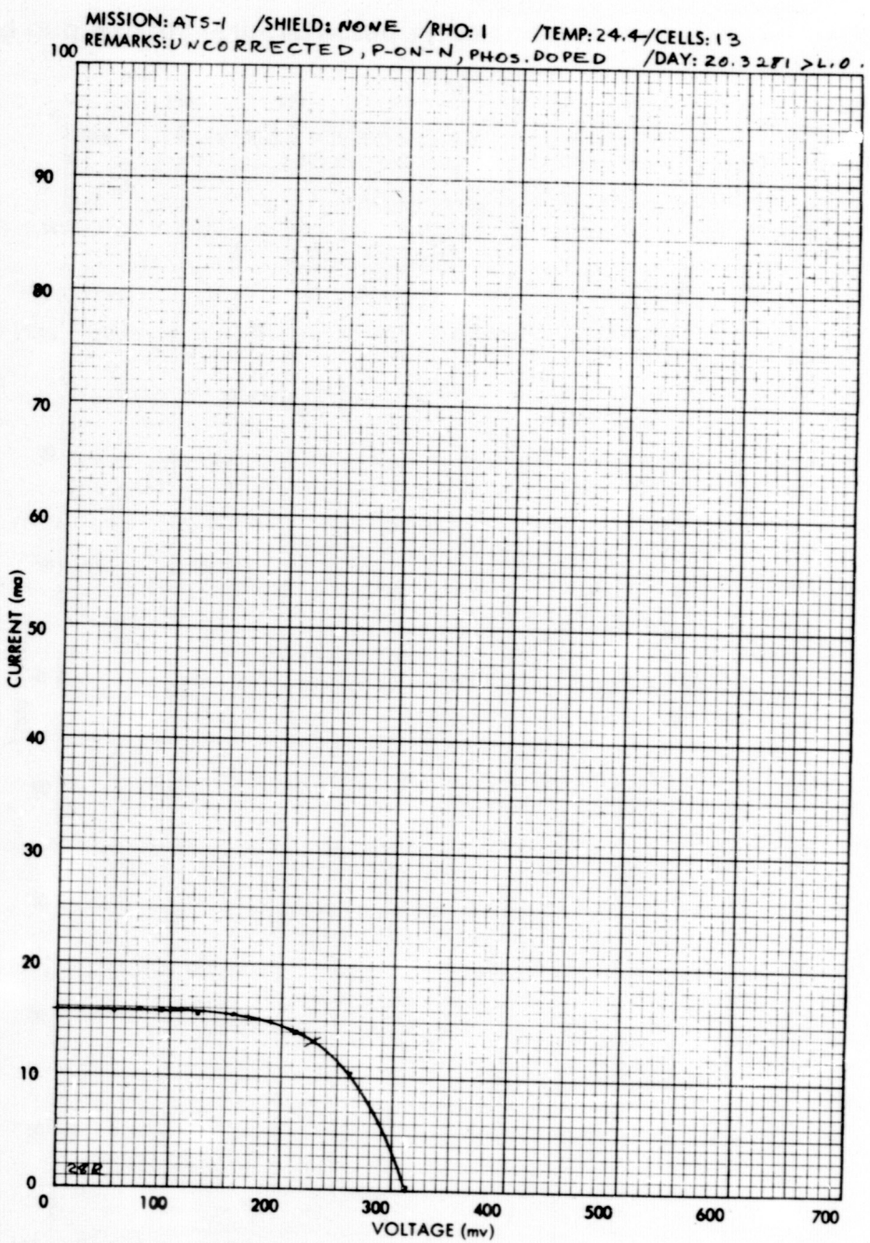


Figure 28. Cell 13, Days 0.064 and 20.3. Uncorrected Data

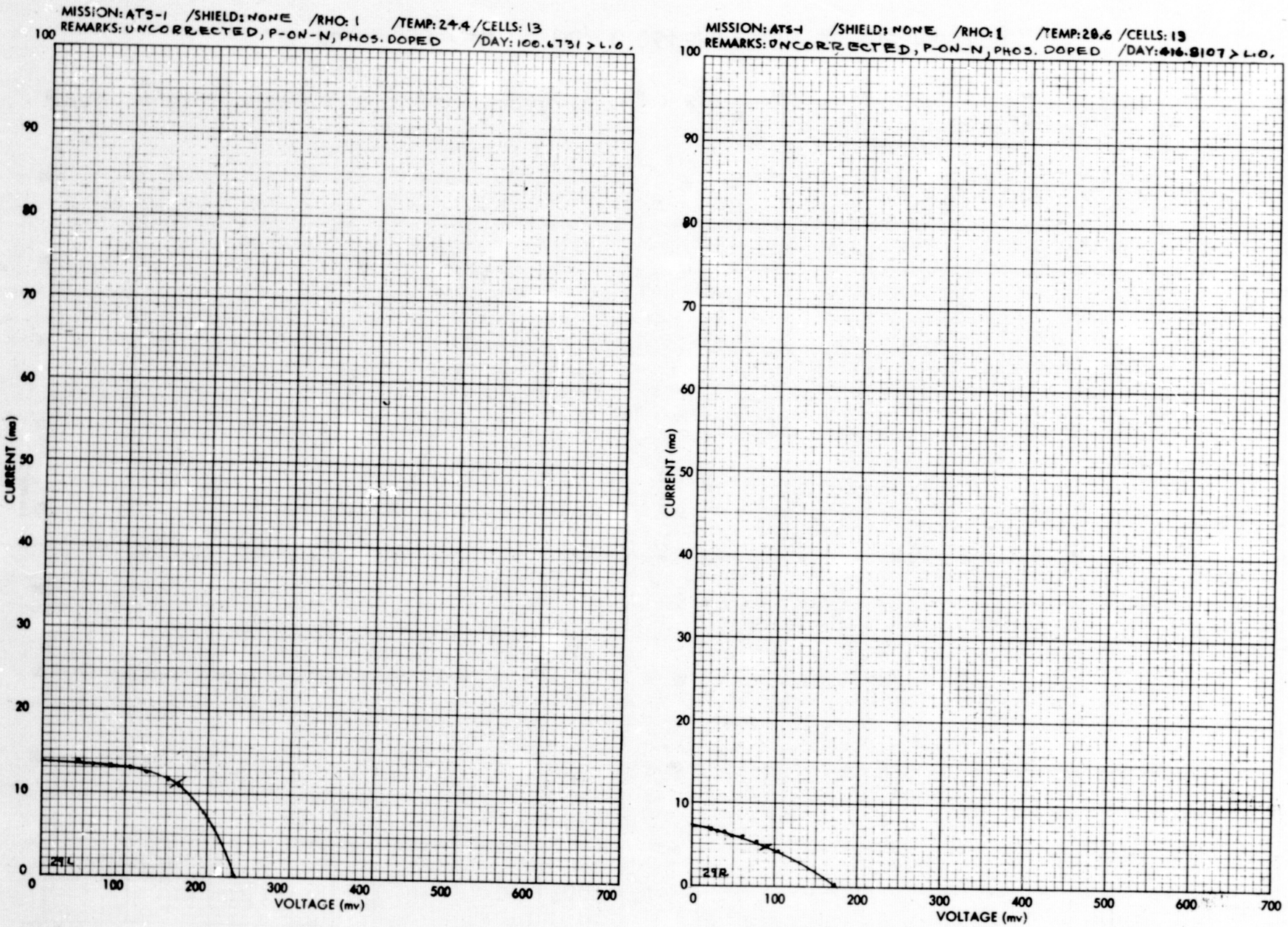
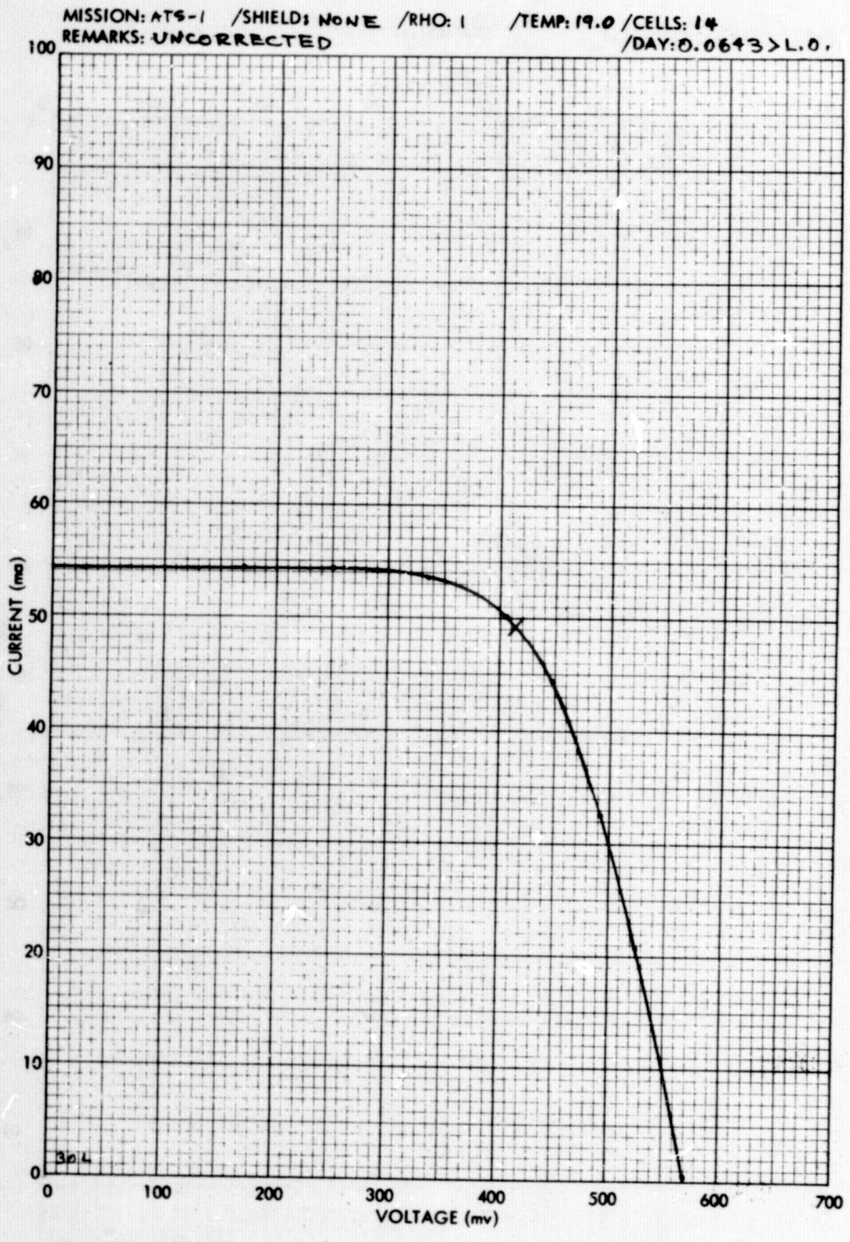


Figure 29. Cell 13, Days 100.6 and 416.8. Uncorrected Data



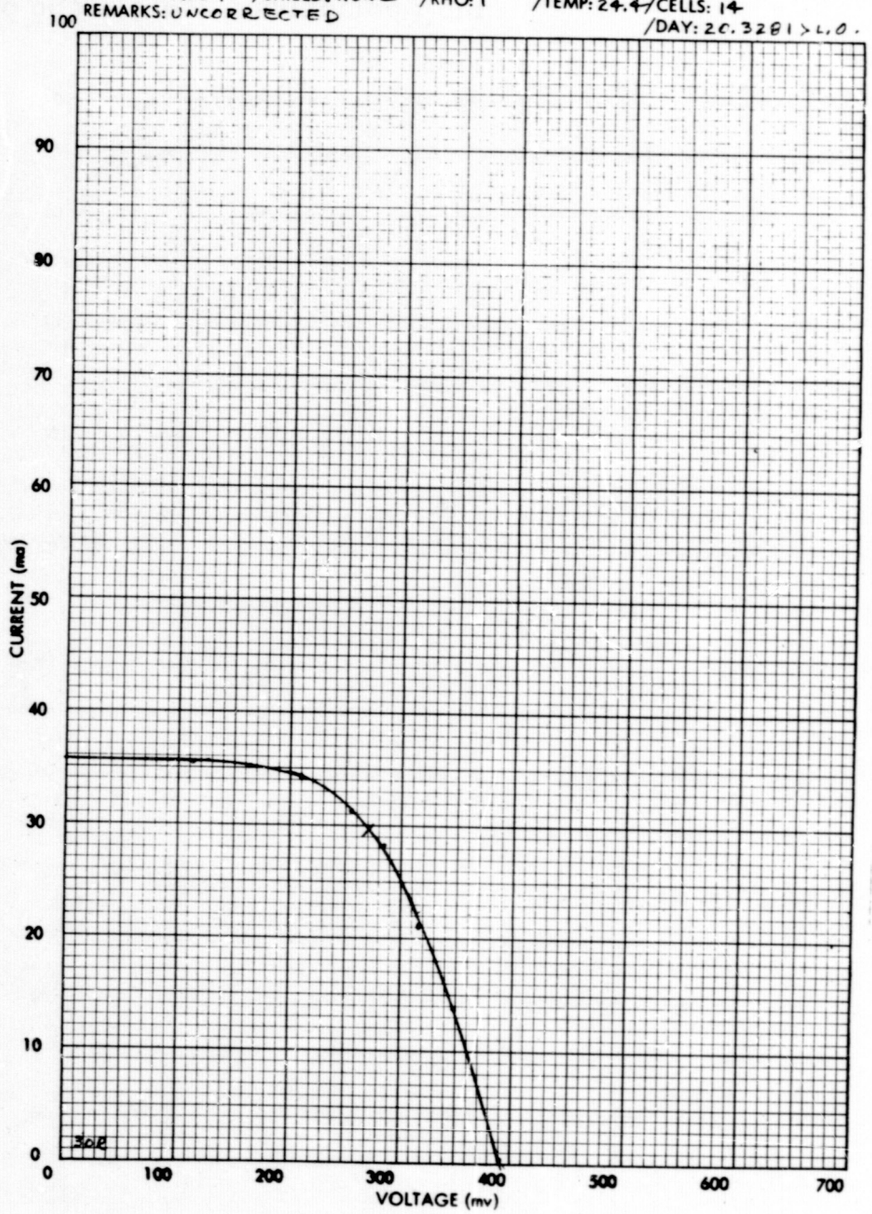
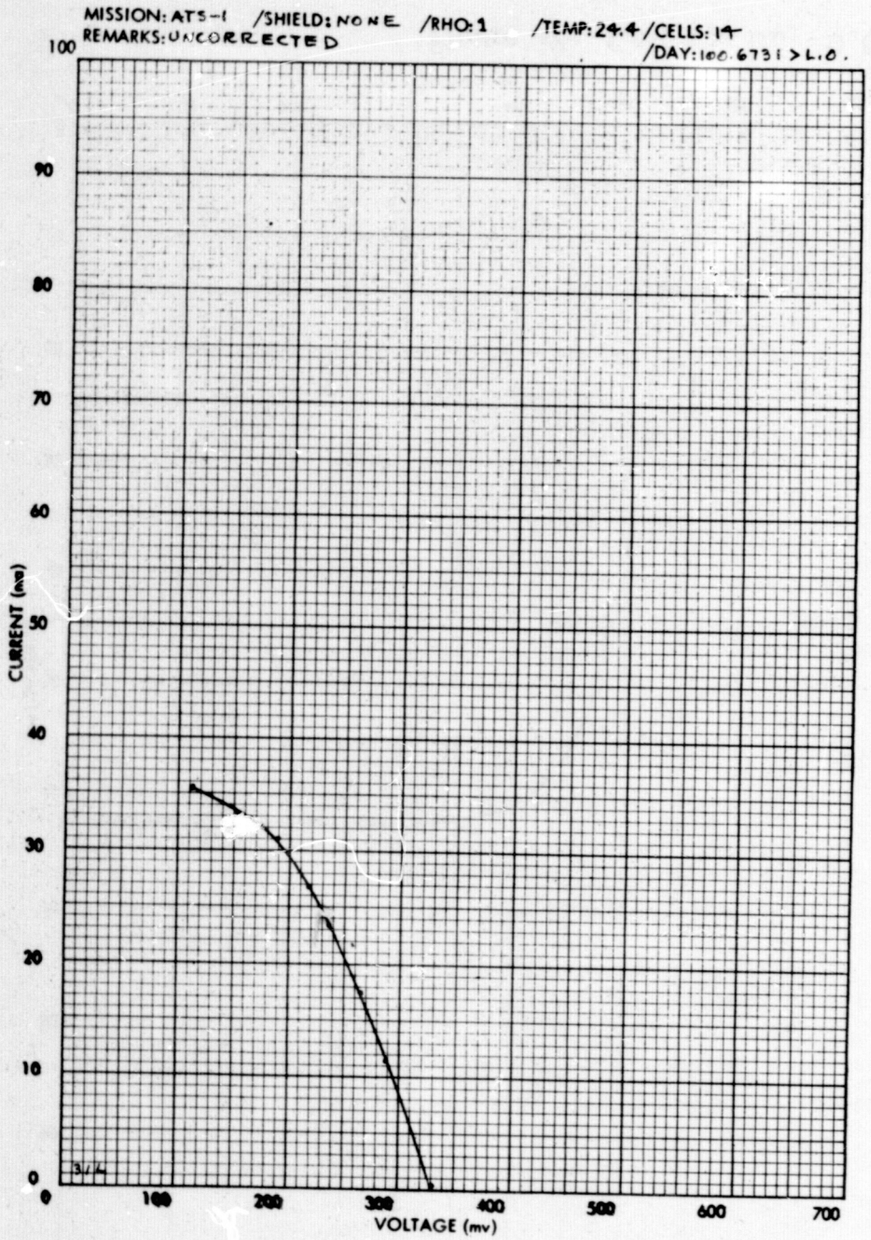


Figure 30. Cell 14, Days 0.064 and 20.3. Uncorrected Data



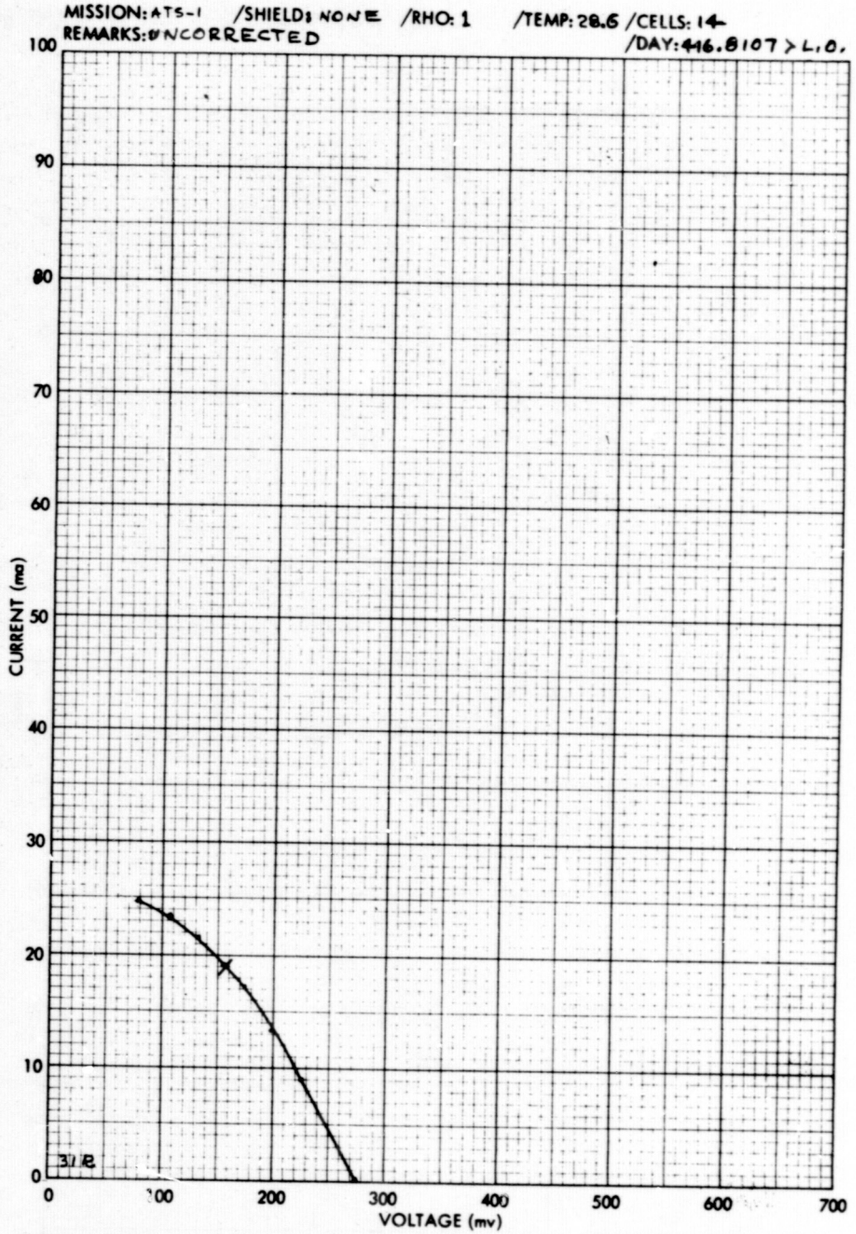
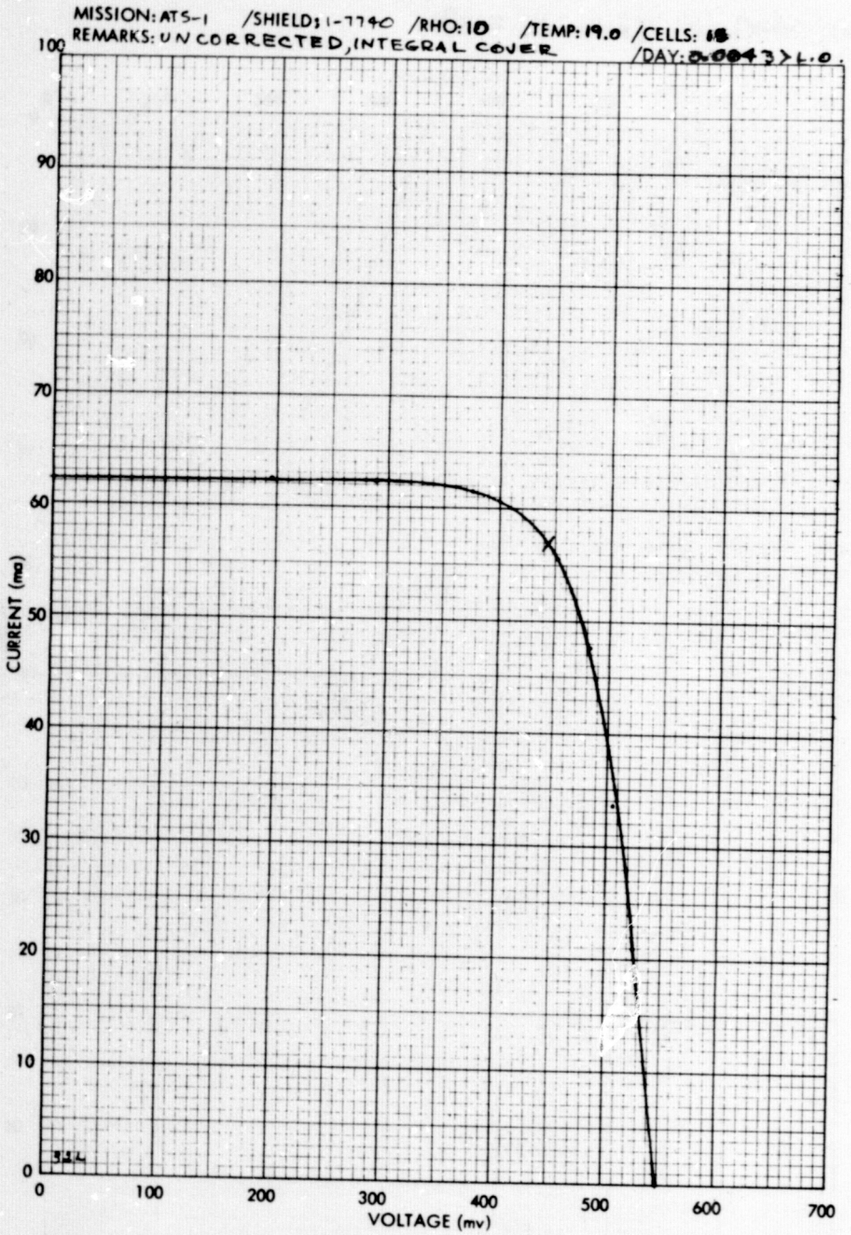


Figure 31. Cell 14, Days 100.6 and 416.8. Uncorrected Data



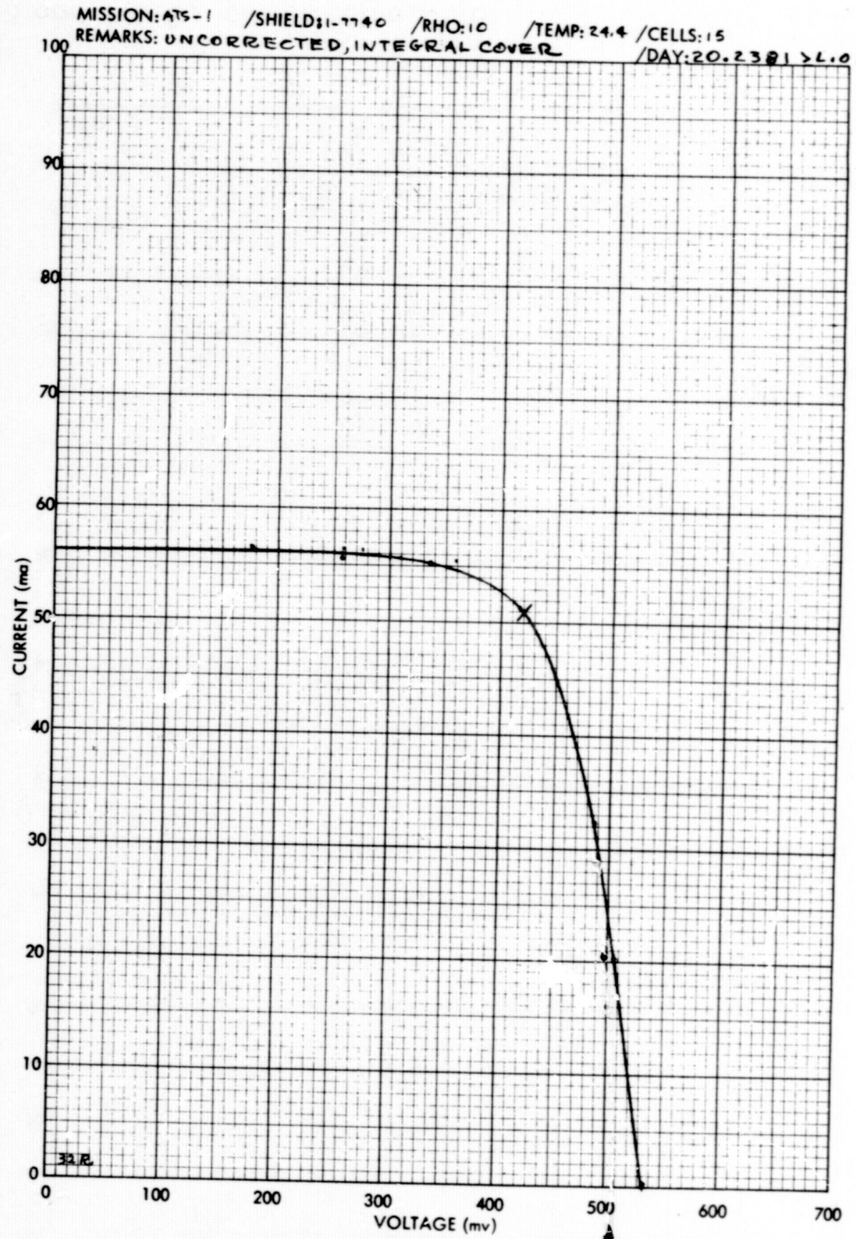
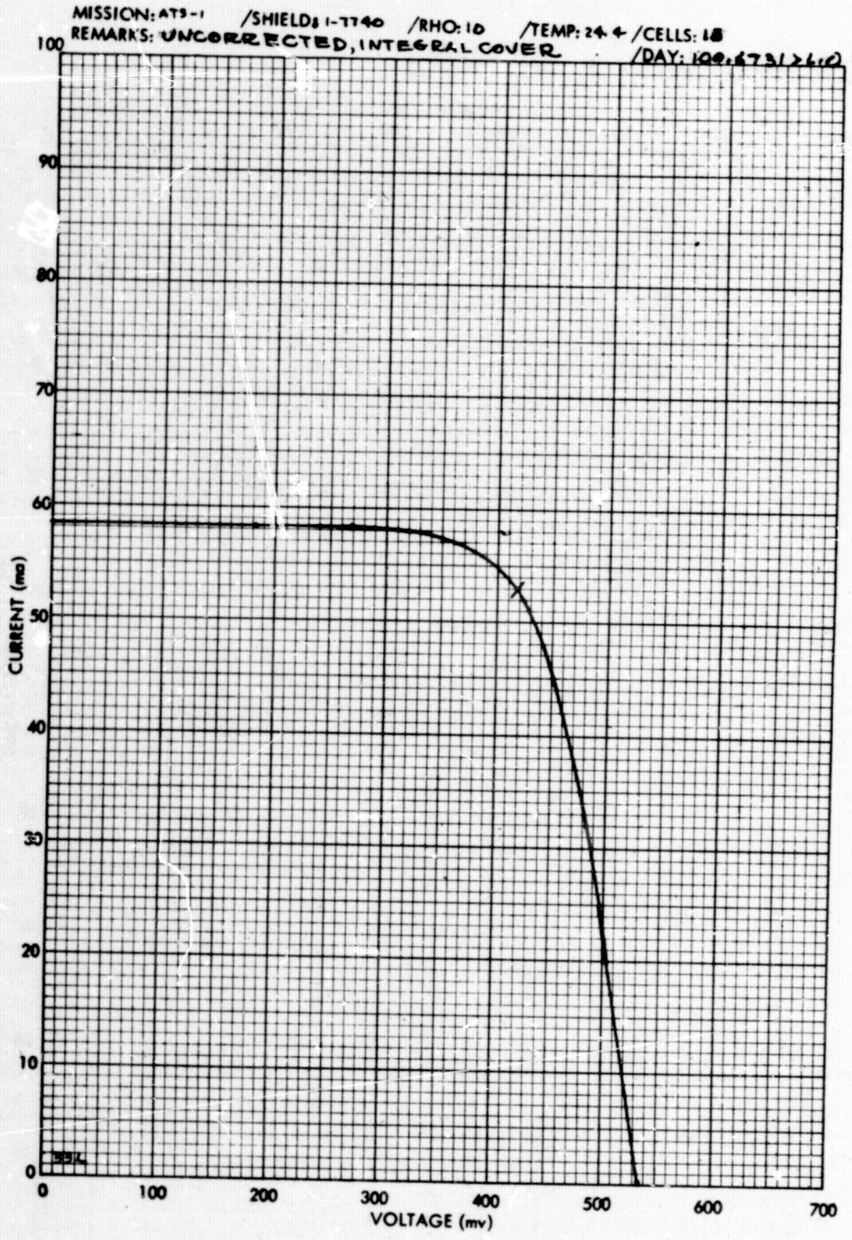


Figure 32. Cell 15, Days 0.064 and 20.3. Uncorrected Data



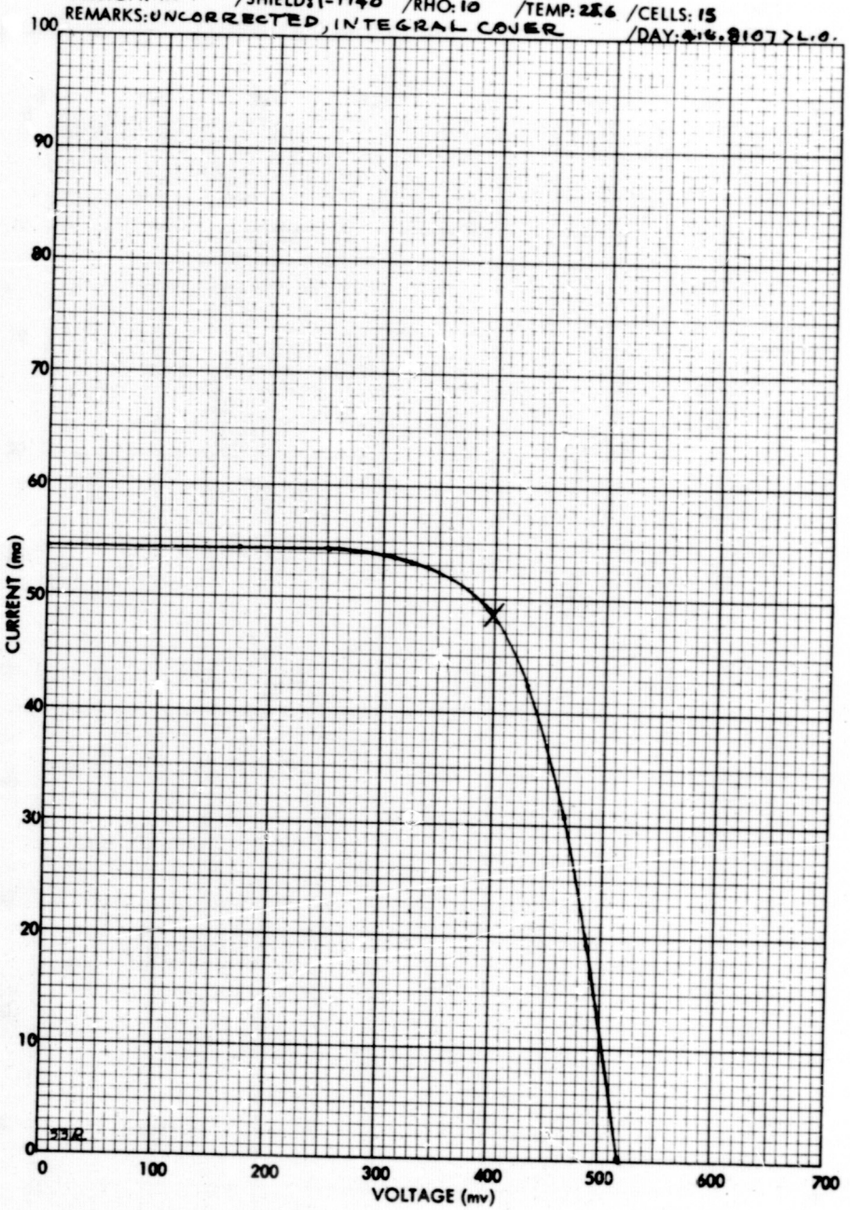
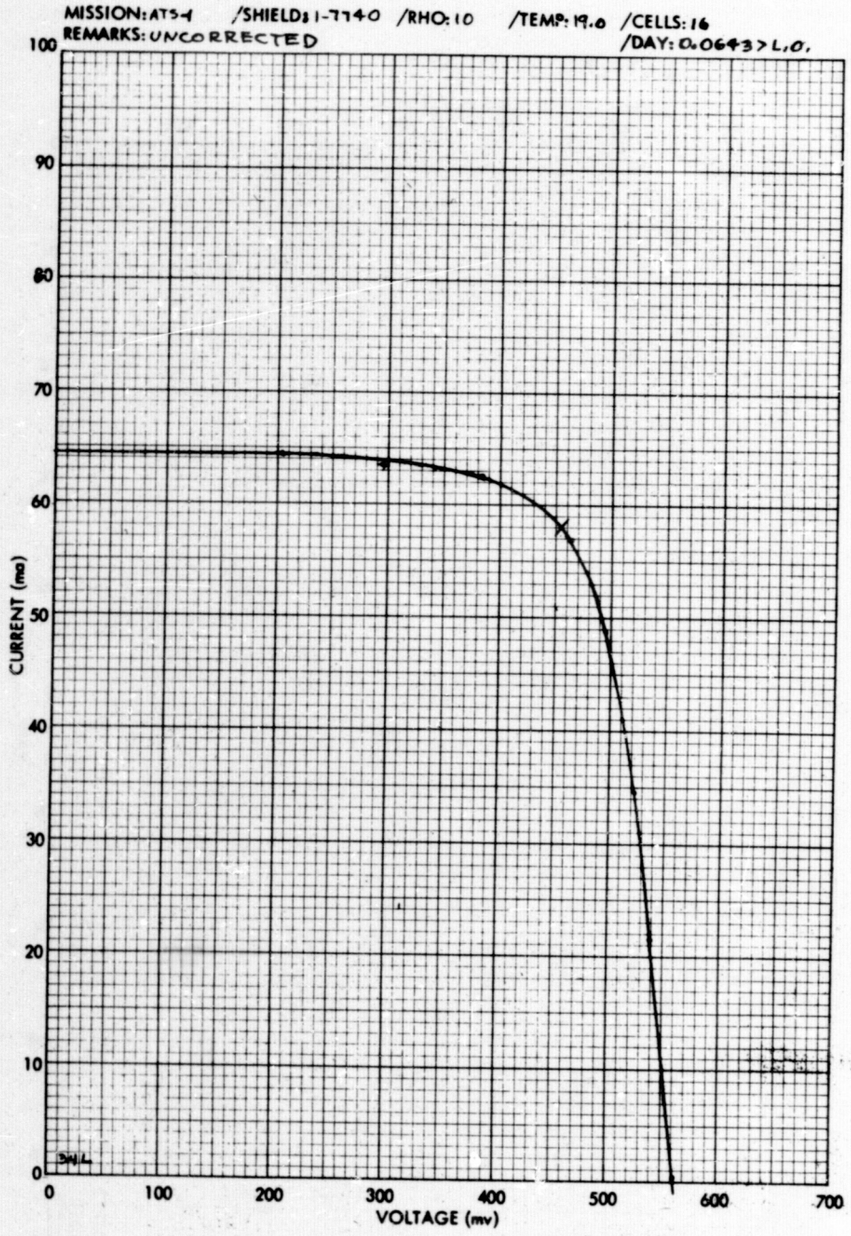


Figure 33. Cell 15, Days 100.6 and 416.8. Uncorrected Data



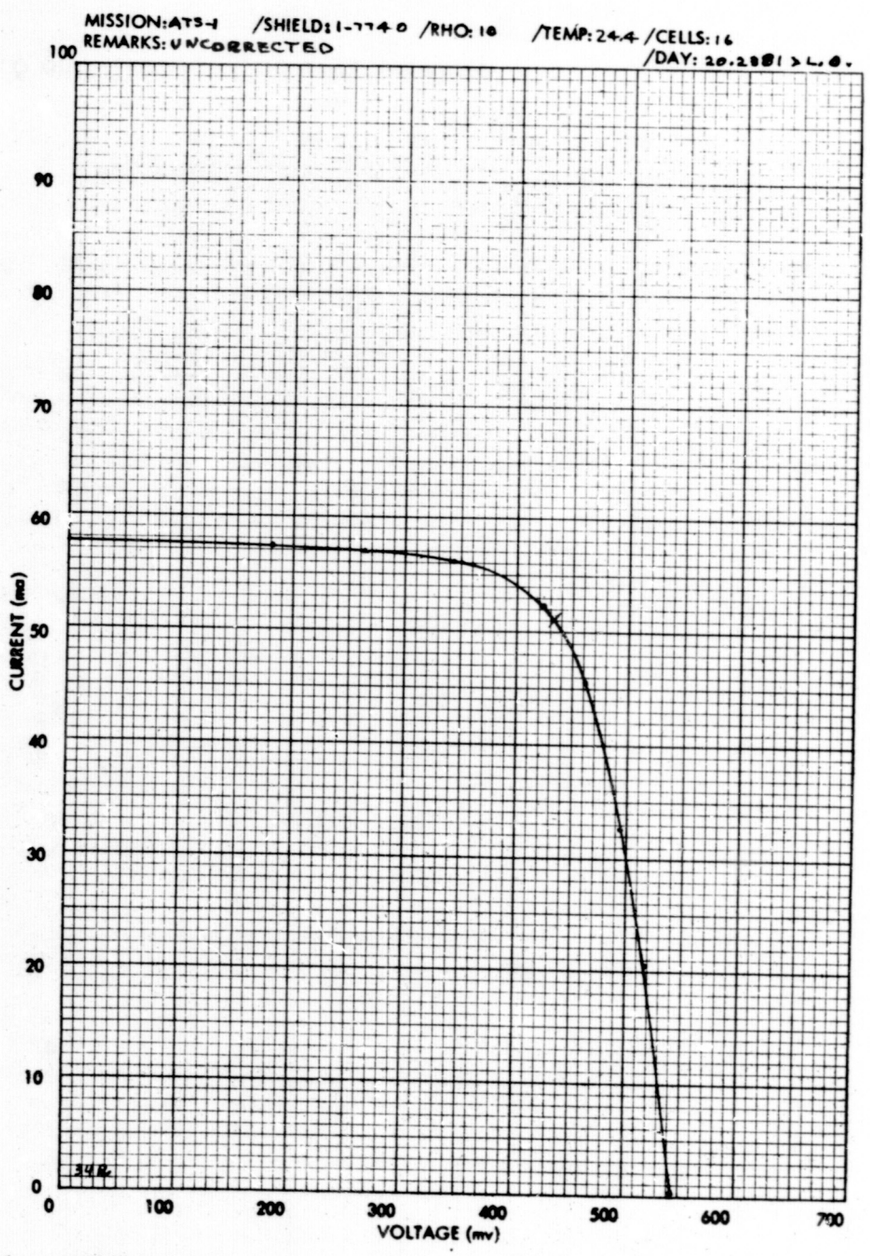
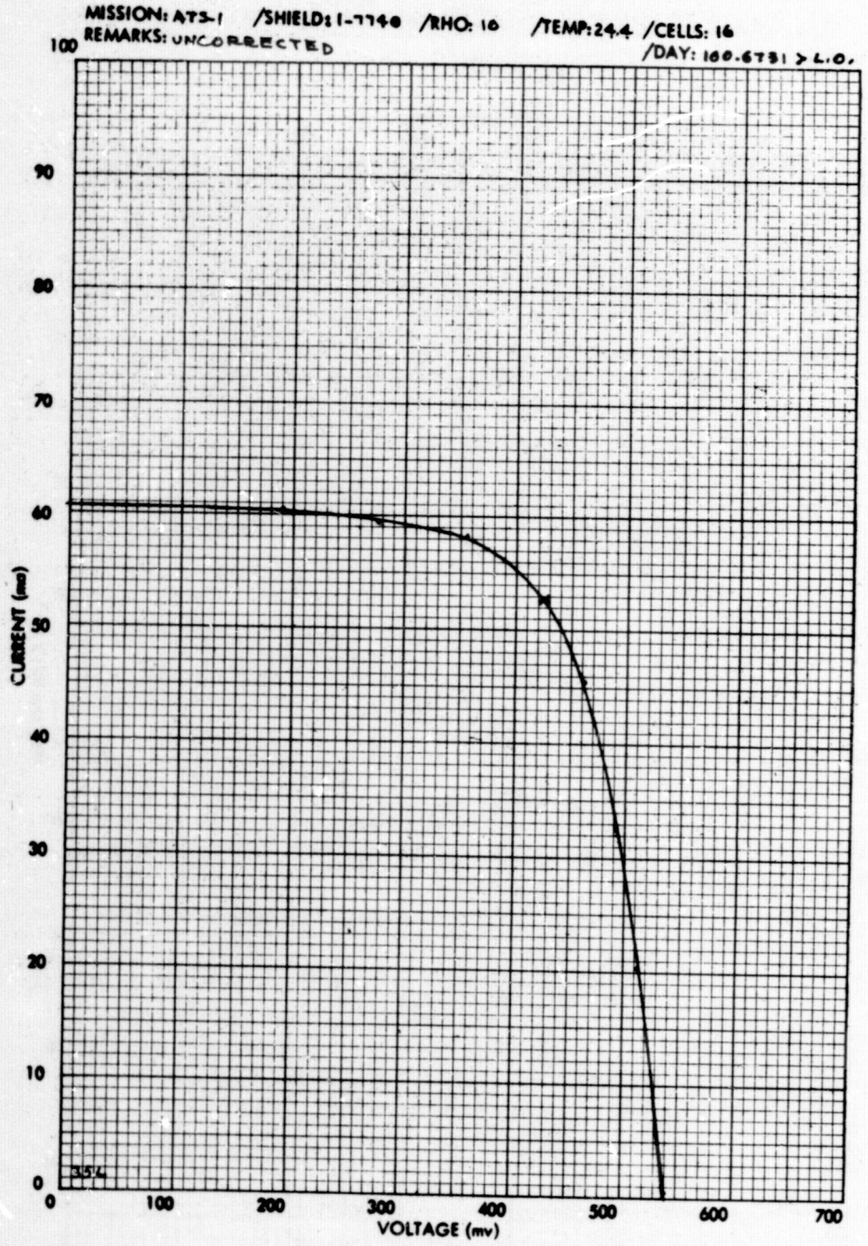


Figure 34. Cell 16, Days 0.064 and 20.3. Uncorrected Data



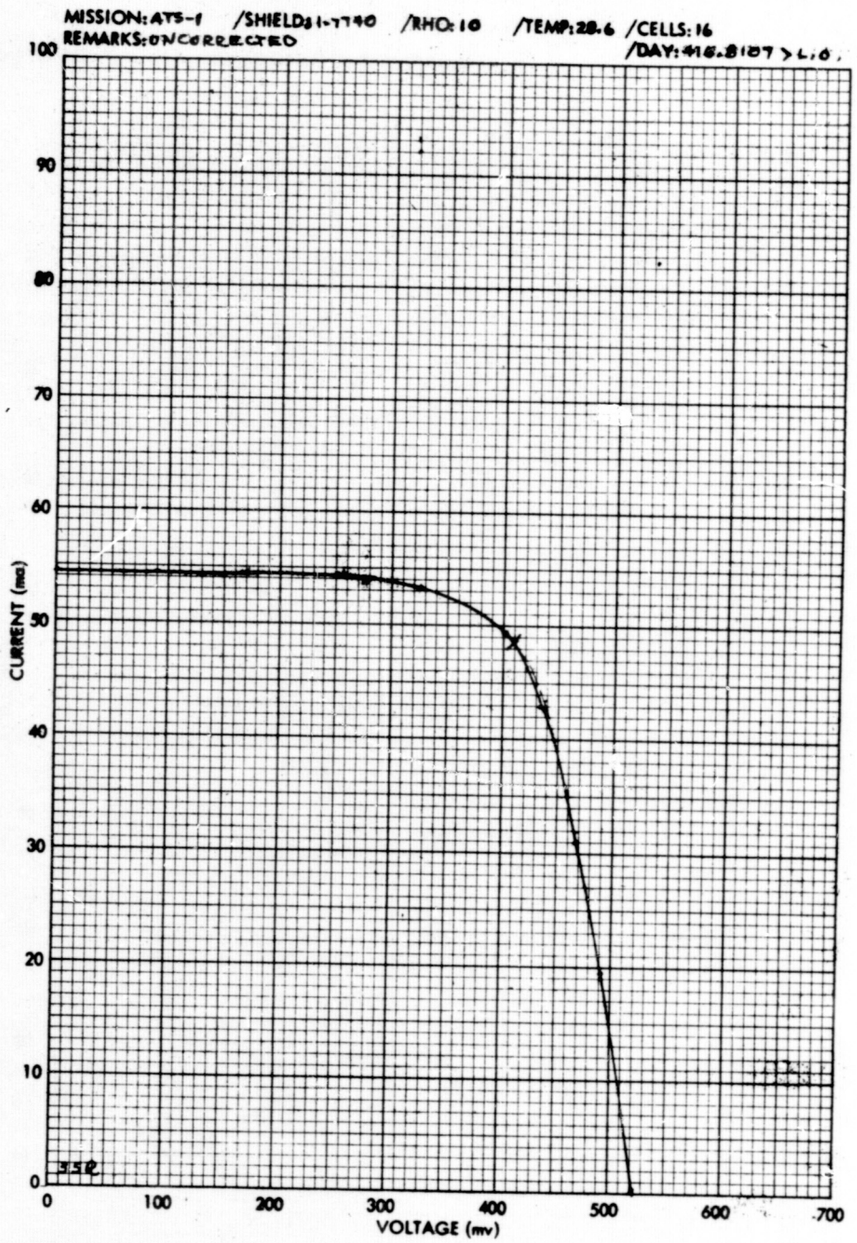
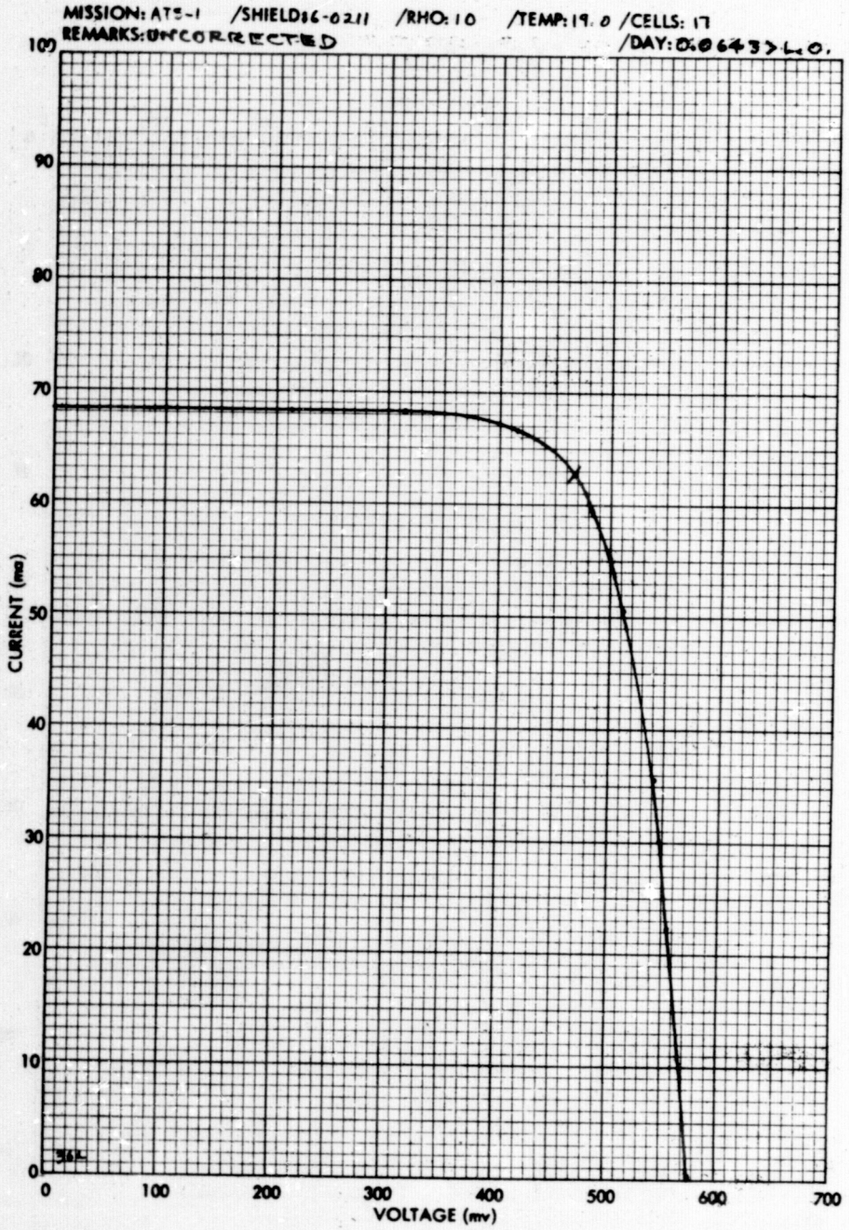


Figure 35. Cell 16, Days 100.6 and 416.8. Uncorrected Data



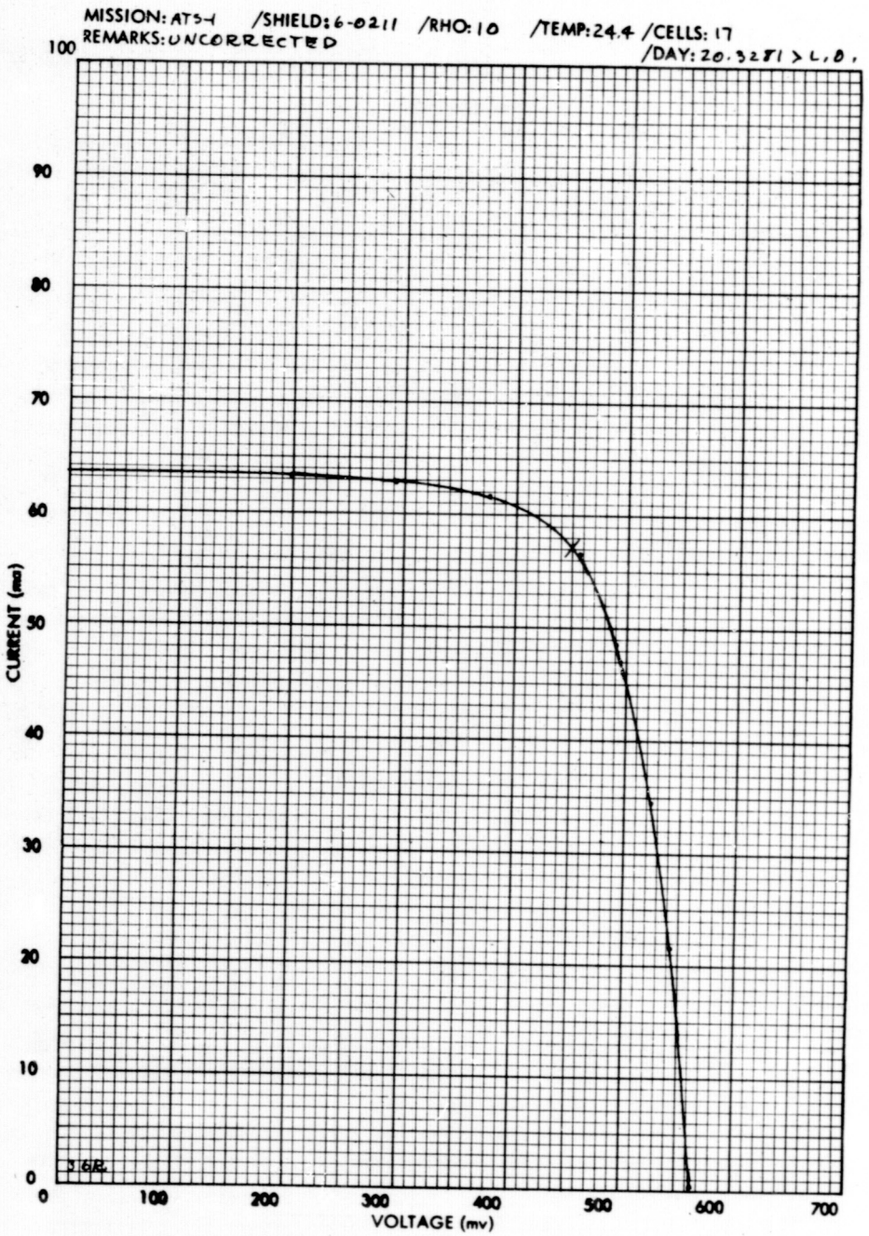
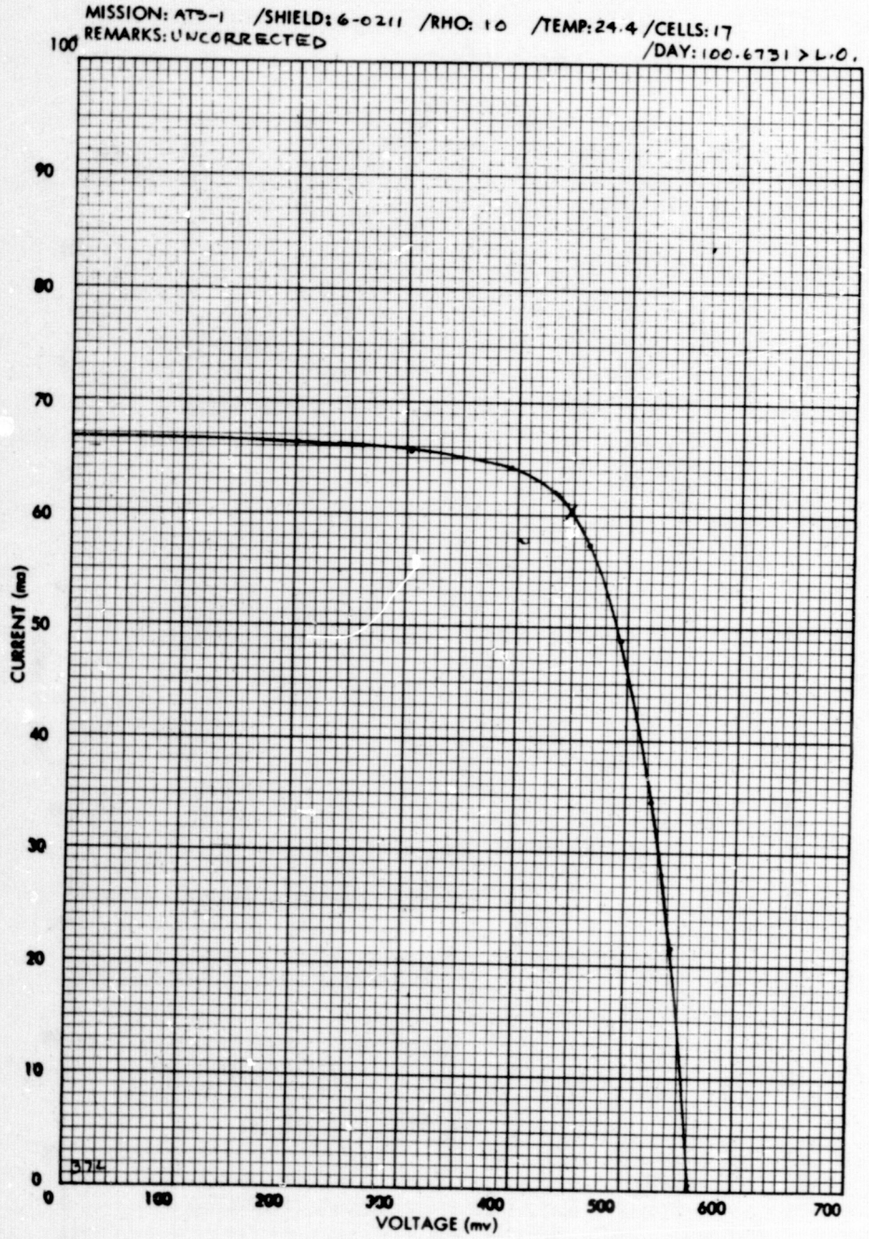


Figure 36. Cell 17, Days 0.064 and 20.3. Uncorrected Data



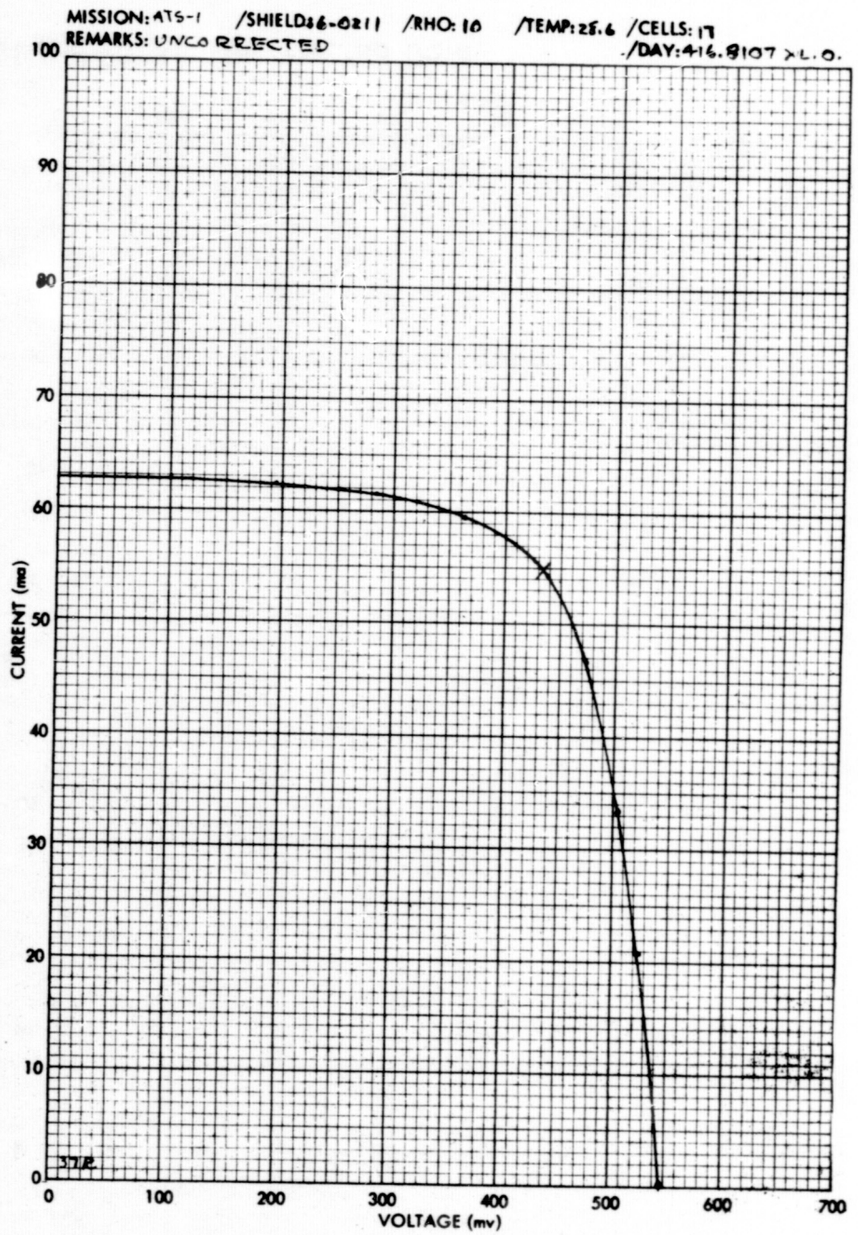
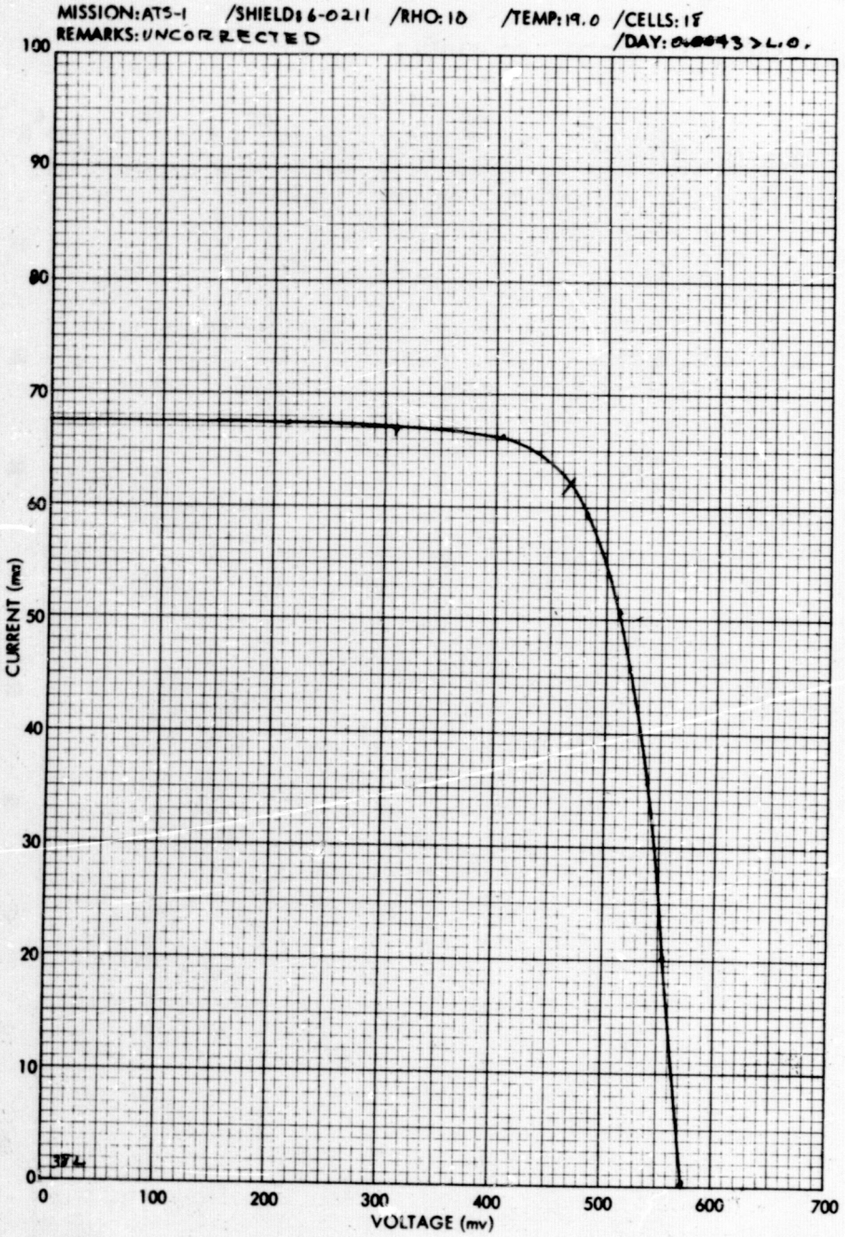


Figure 37. Cell 17, Days 100.6 and 416.8. Uncorrected Data



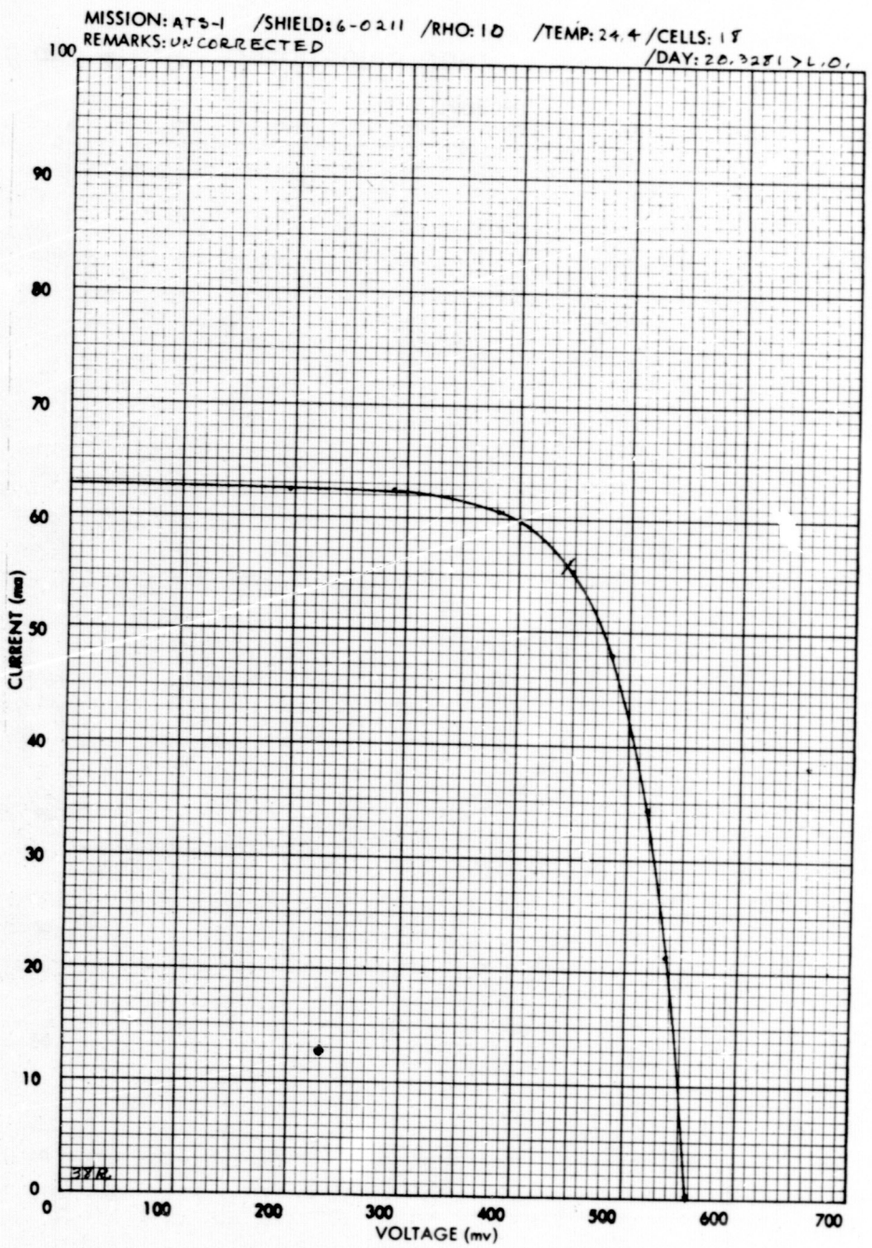


Figure 38. Cell 18, Days 0.064 and 20.3. Uncorrected Data

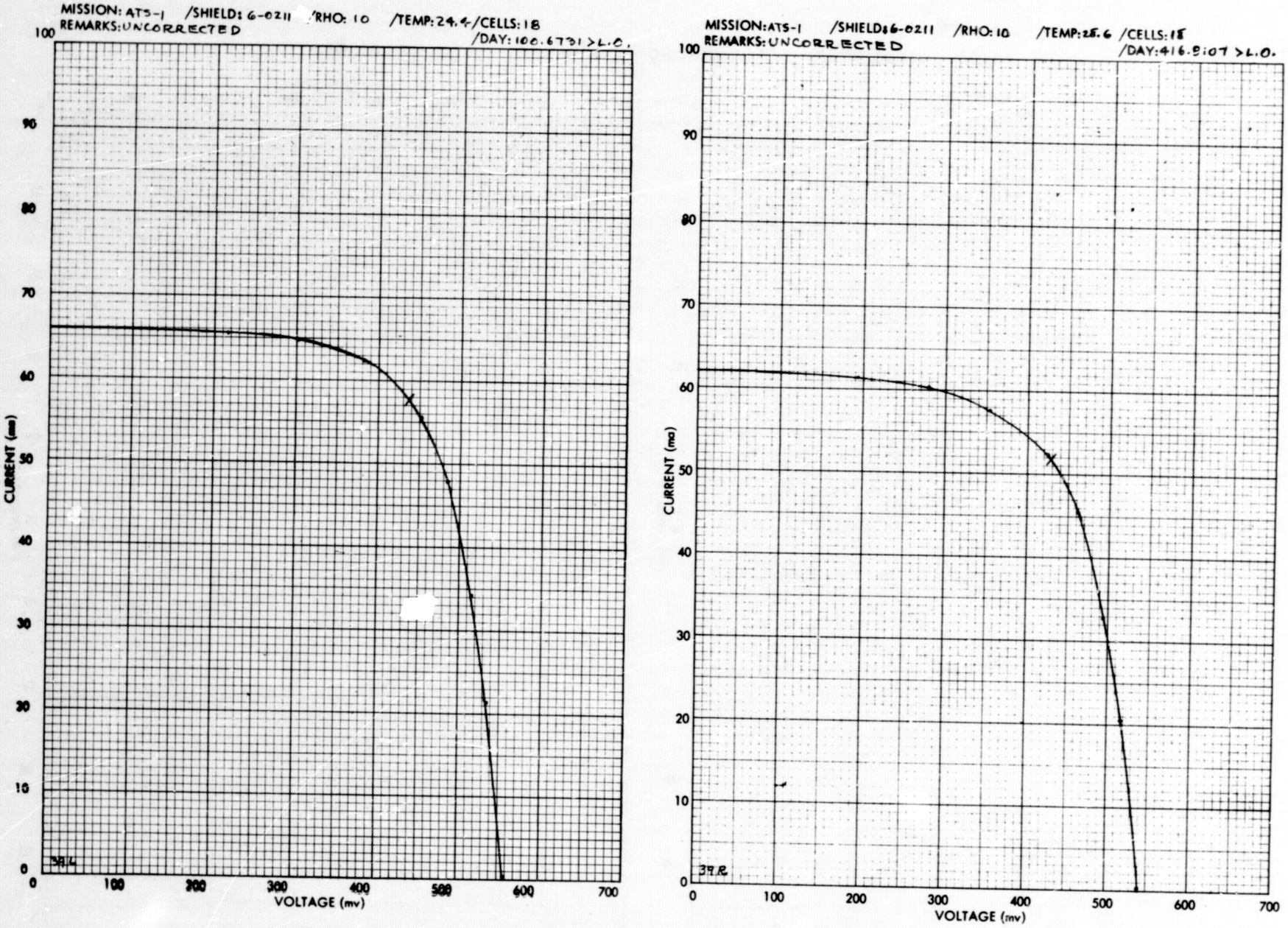


Figure 39. Cell 18, Days 100.6 and 416.8. Uncorrected Data

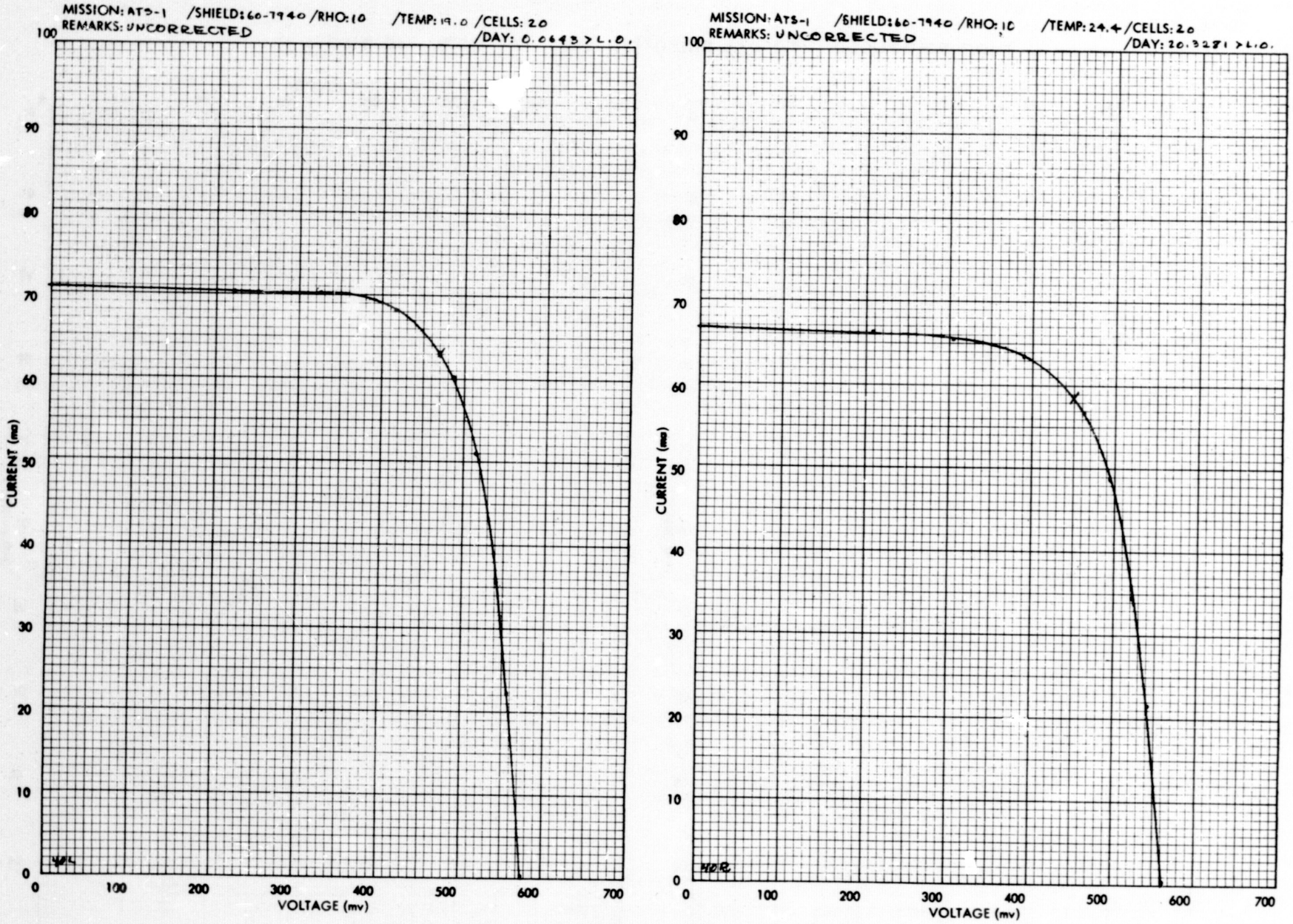
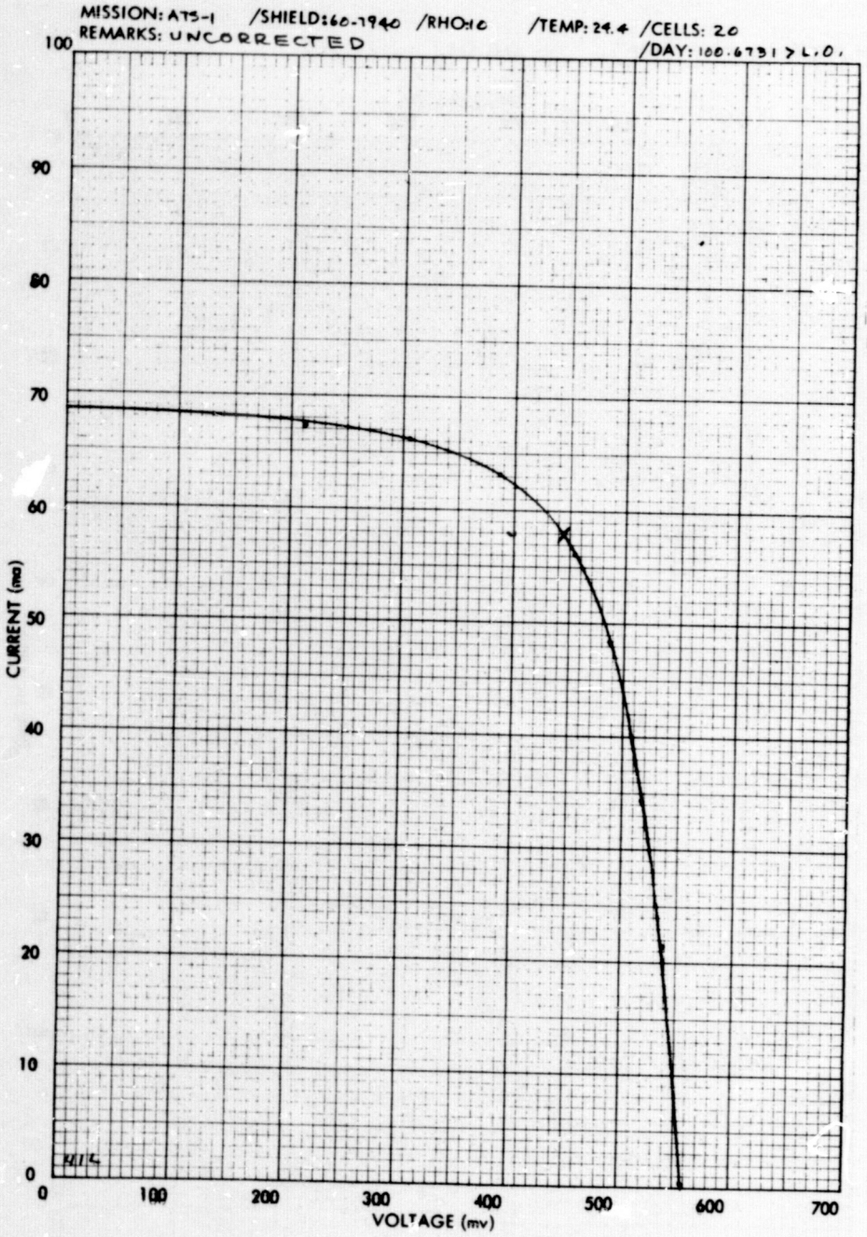


Figure 40. Cell 20, Days 0.064 and 20.3. Uncorrected Data



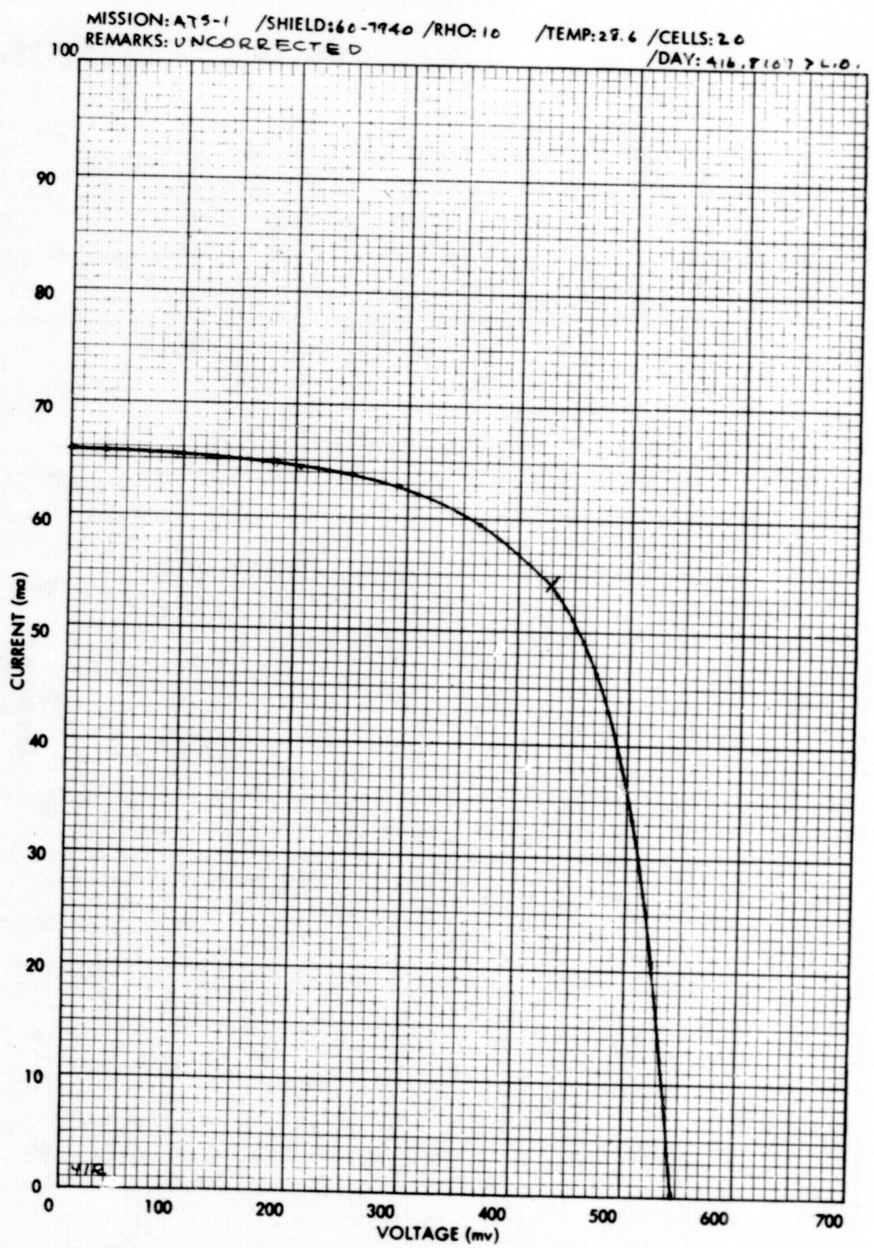
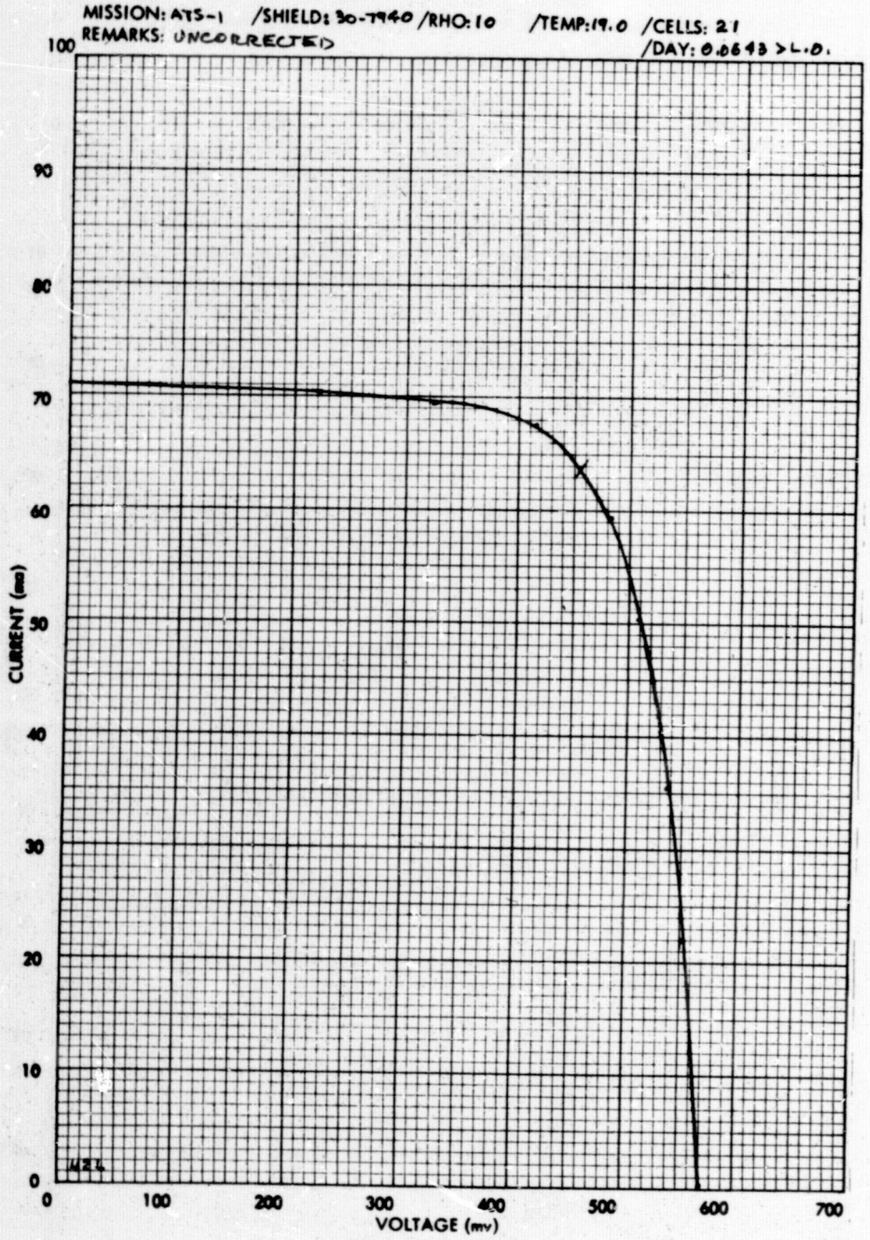


Figure 41. Cell 20, Days 100.6 and 416.8. Uncorrected Data



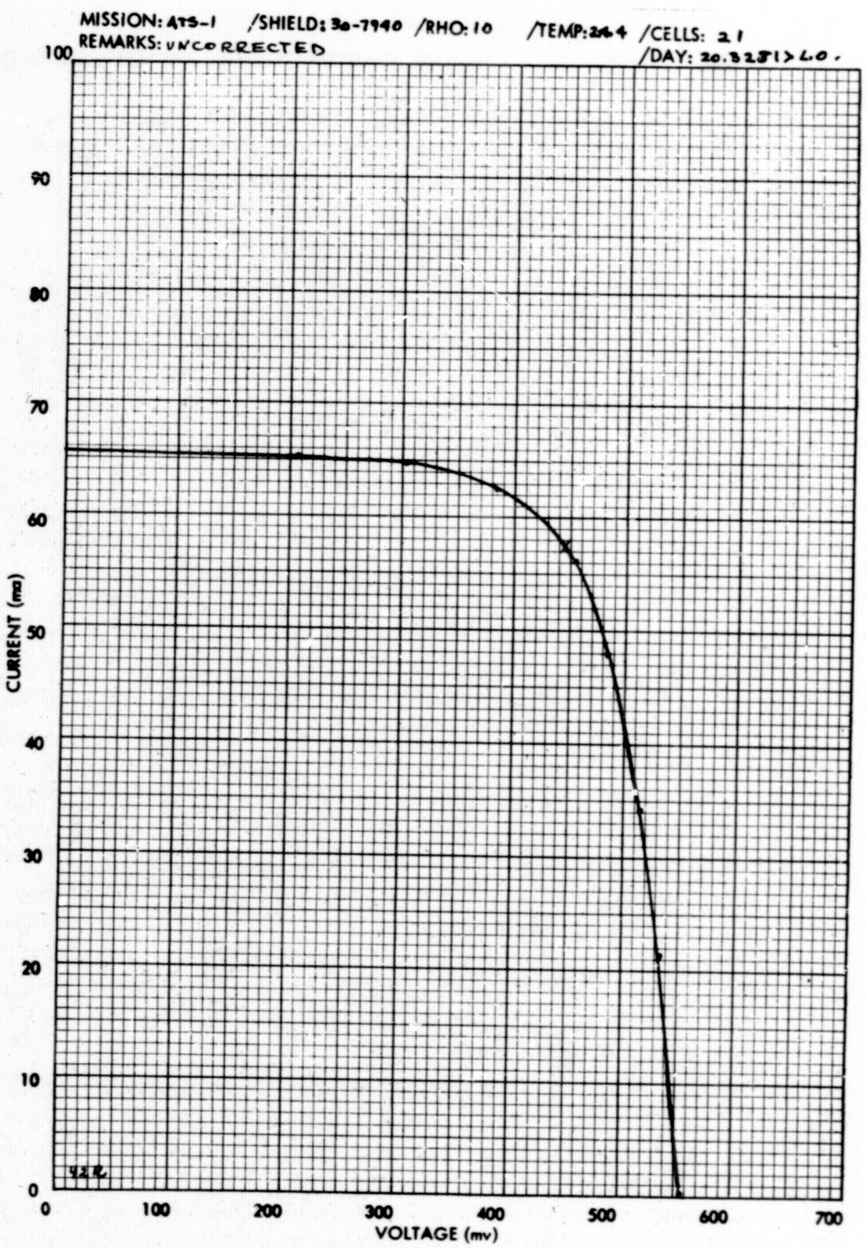
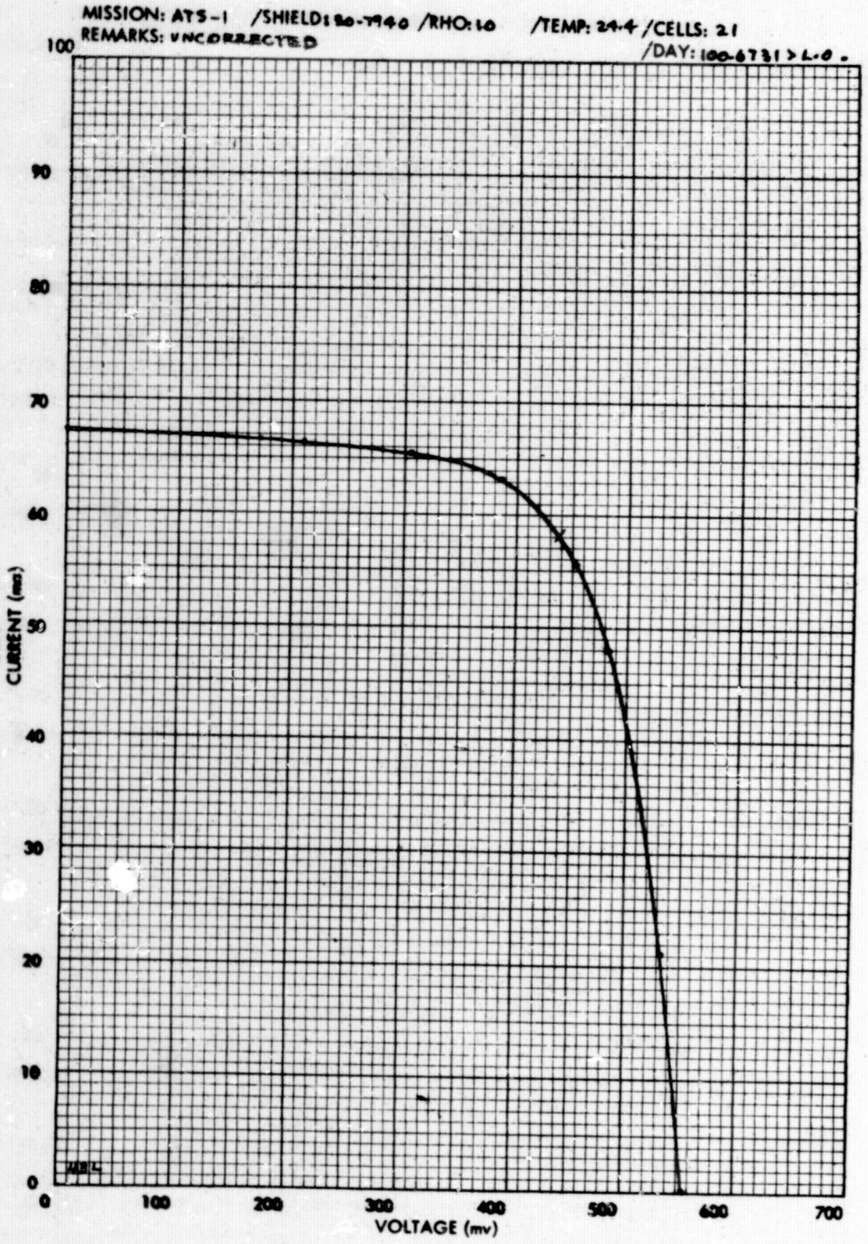


Figure 42. Cell 21, Days 0.064 and 20.3, Uncorrected Data



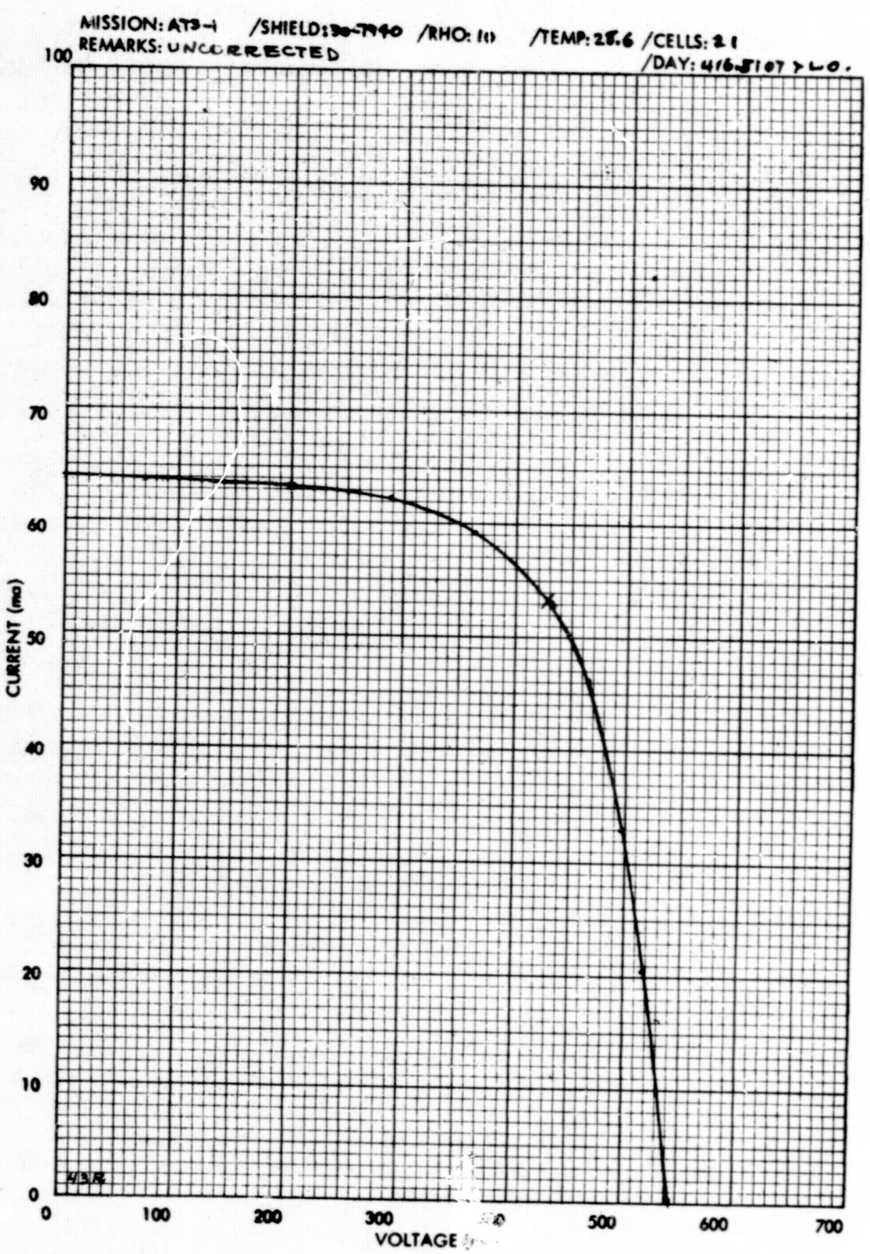
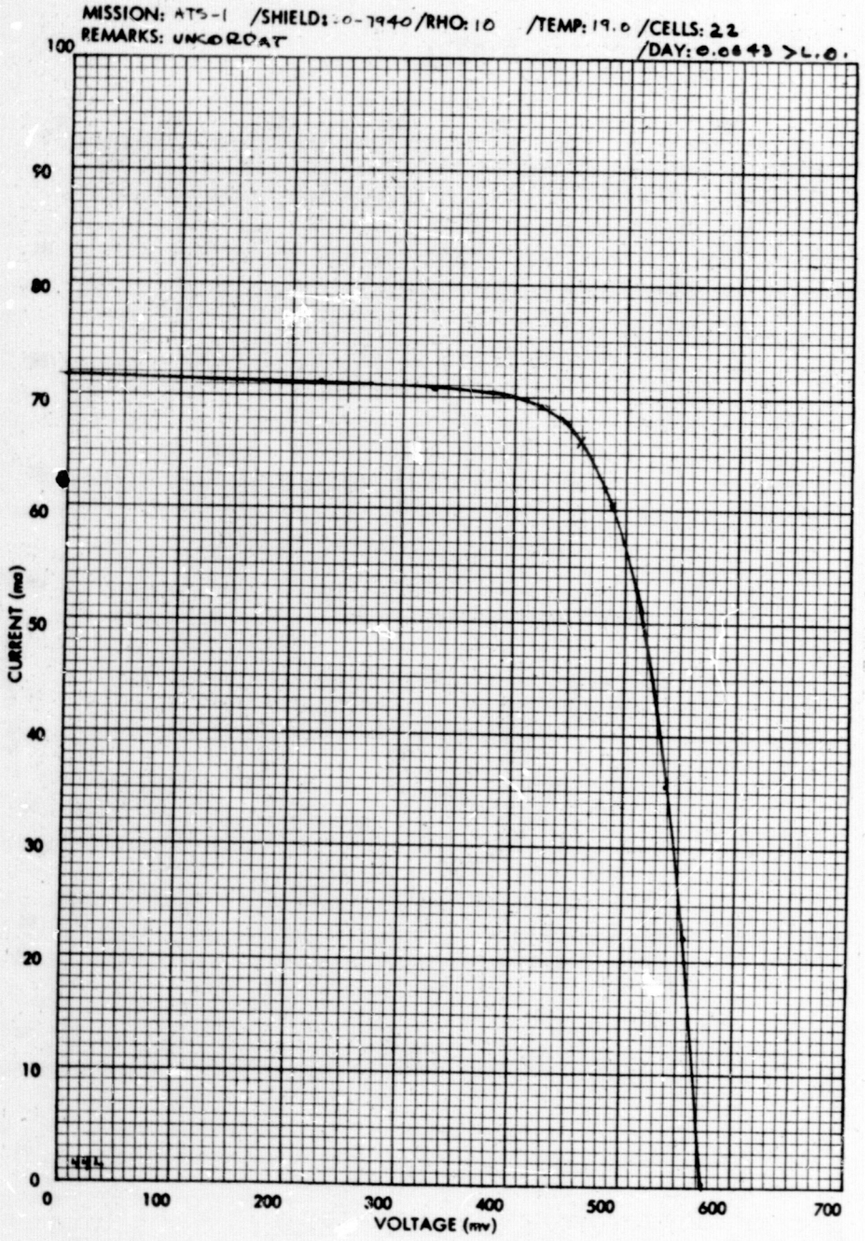


Figure 43. Cell 21, Days 100.6 and 416.8. Uncorrected Data



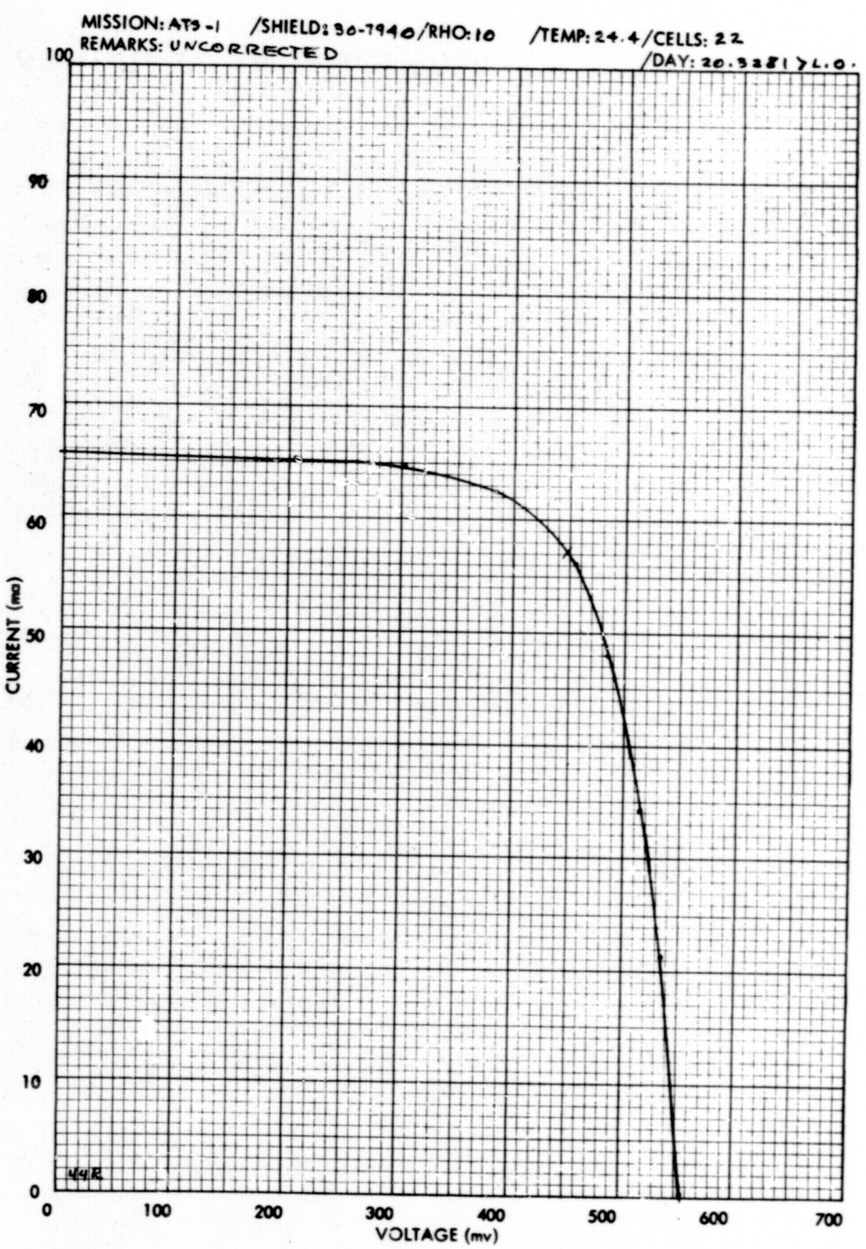
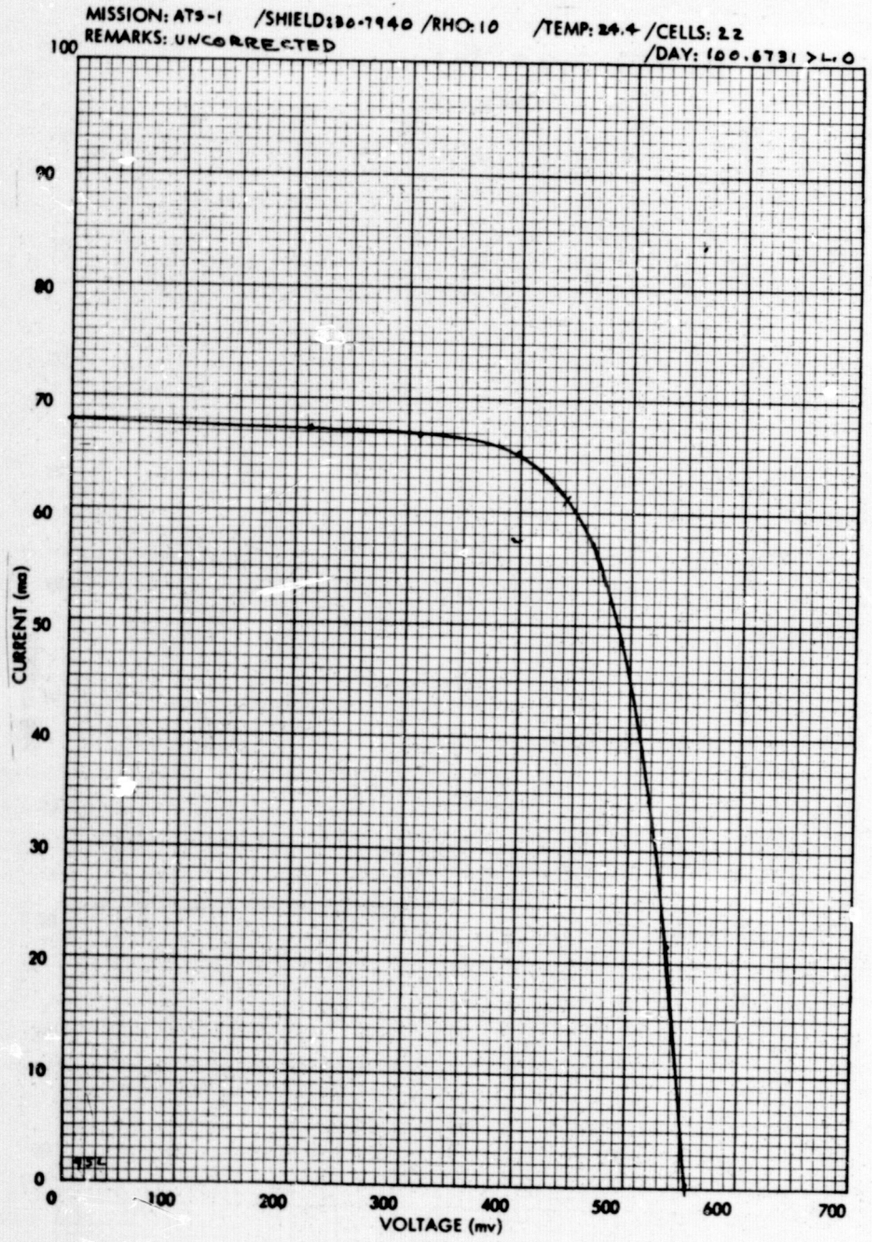


Figure 44. Cell 22, Days 0.064 and 20.3. Uncorrected Data



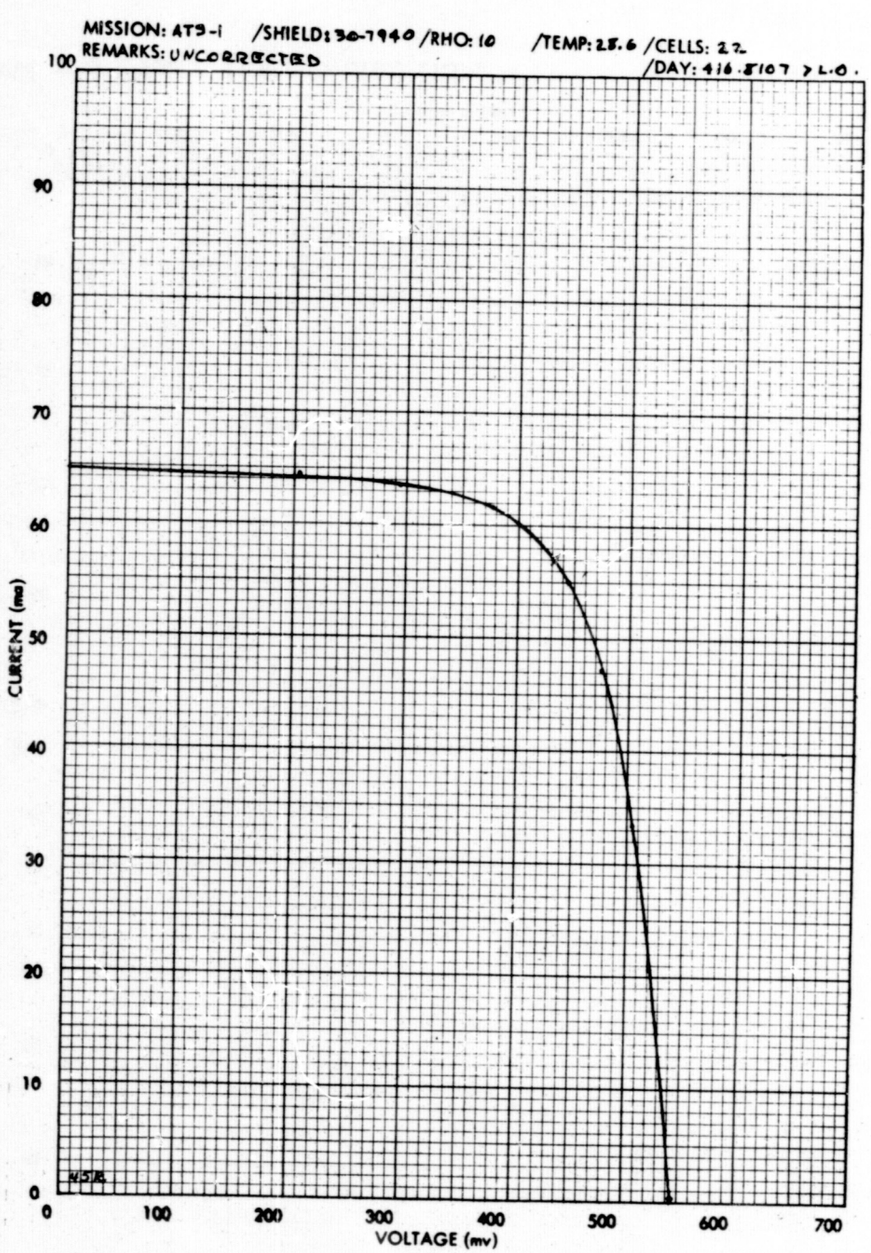
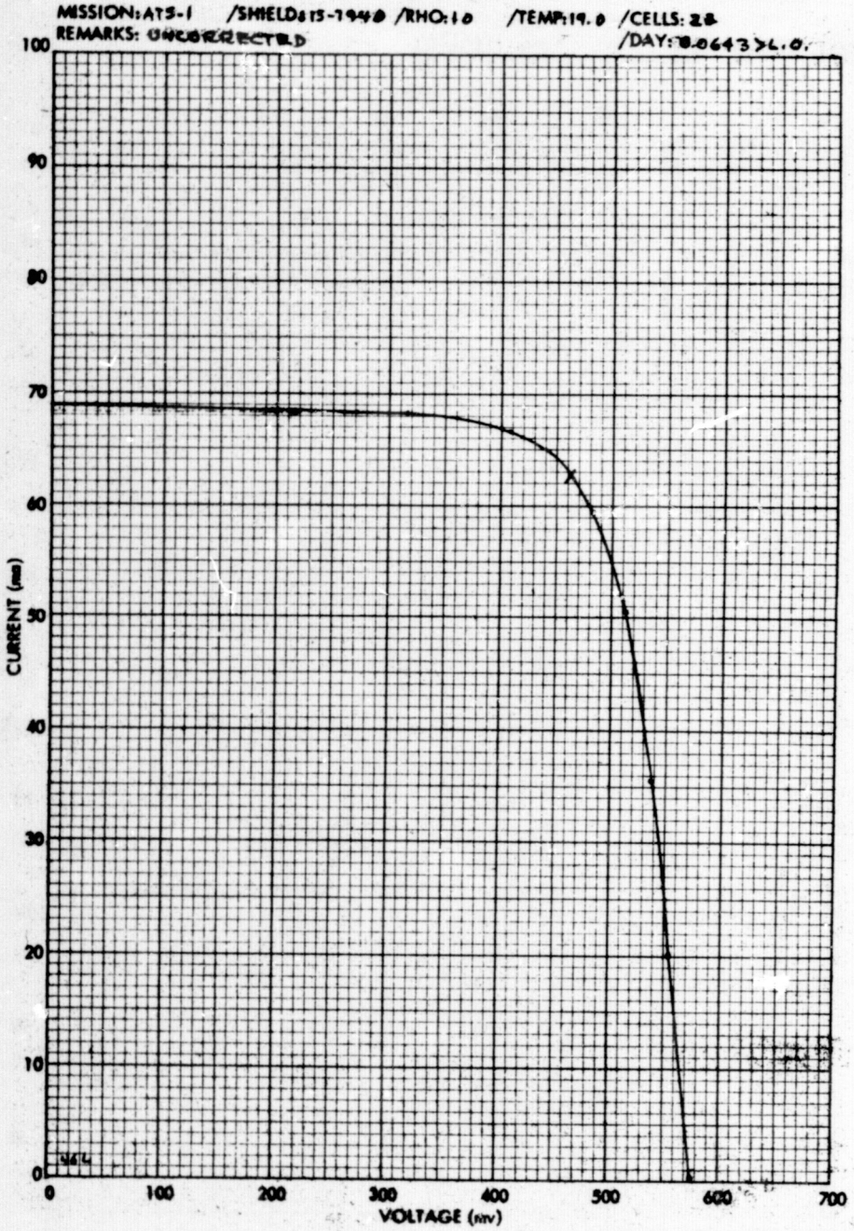


Figure 45. Cell 22, Days 100.6 and 416.8. Uncorrected Data



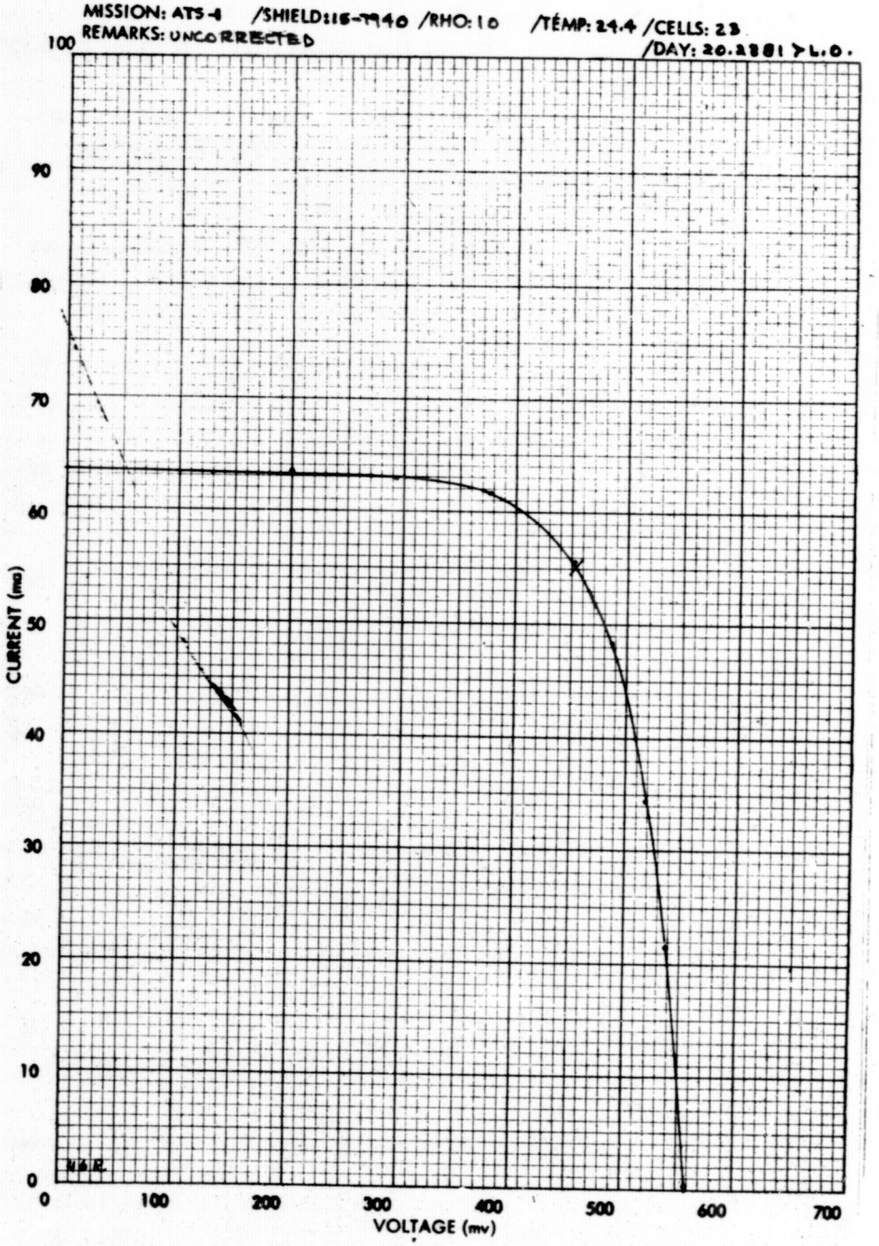
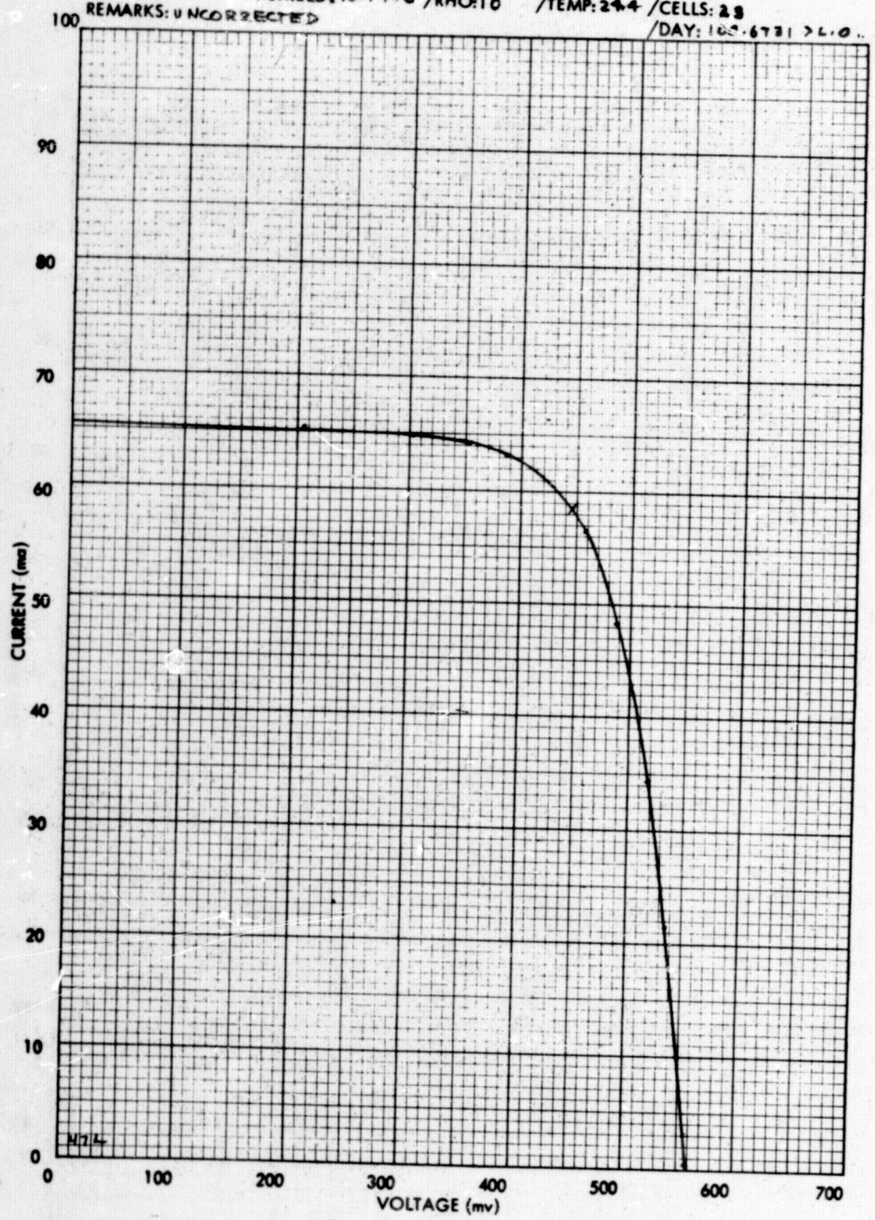


Figure 46. Cell 23, Days 0.064 and 20.3. Uncorrected Data



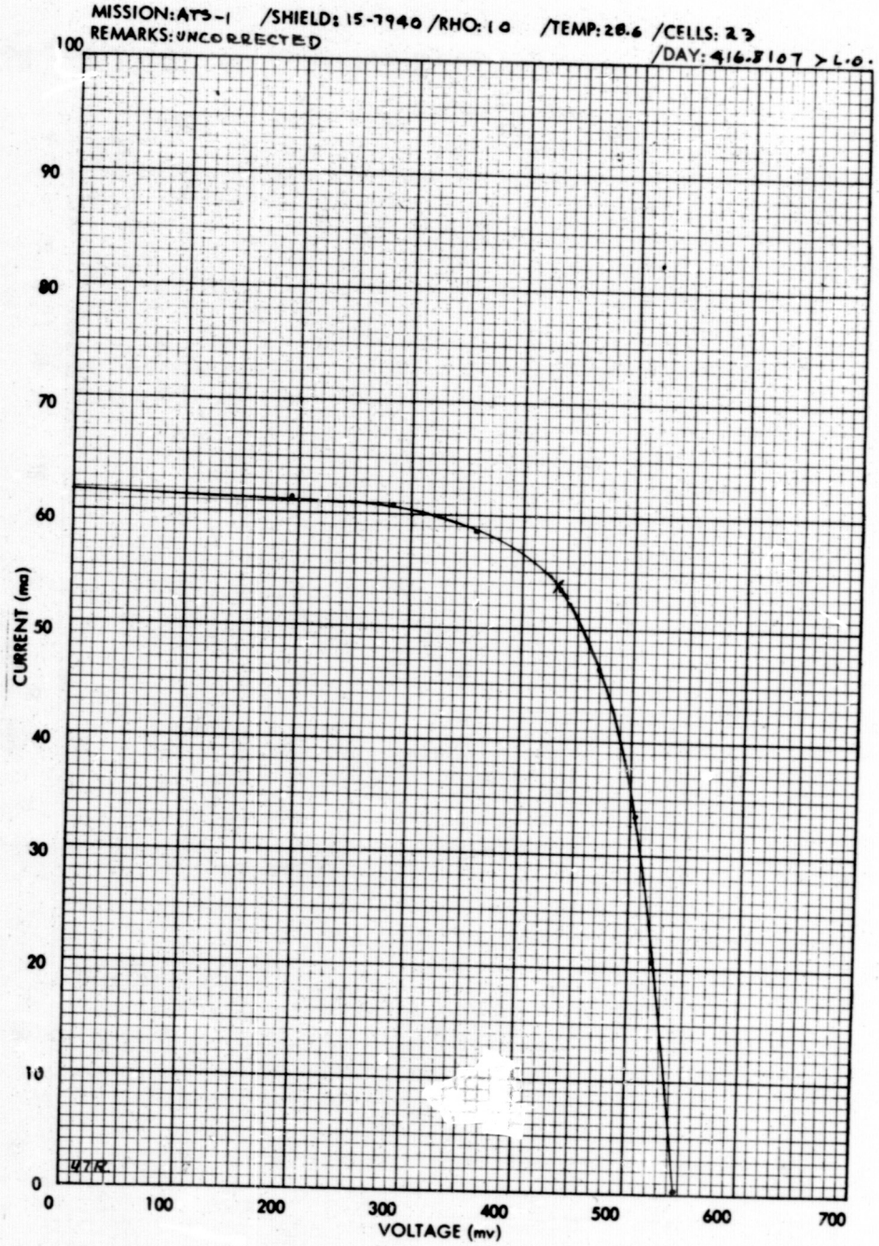
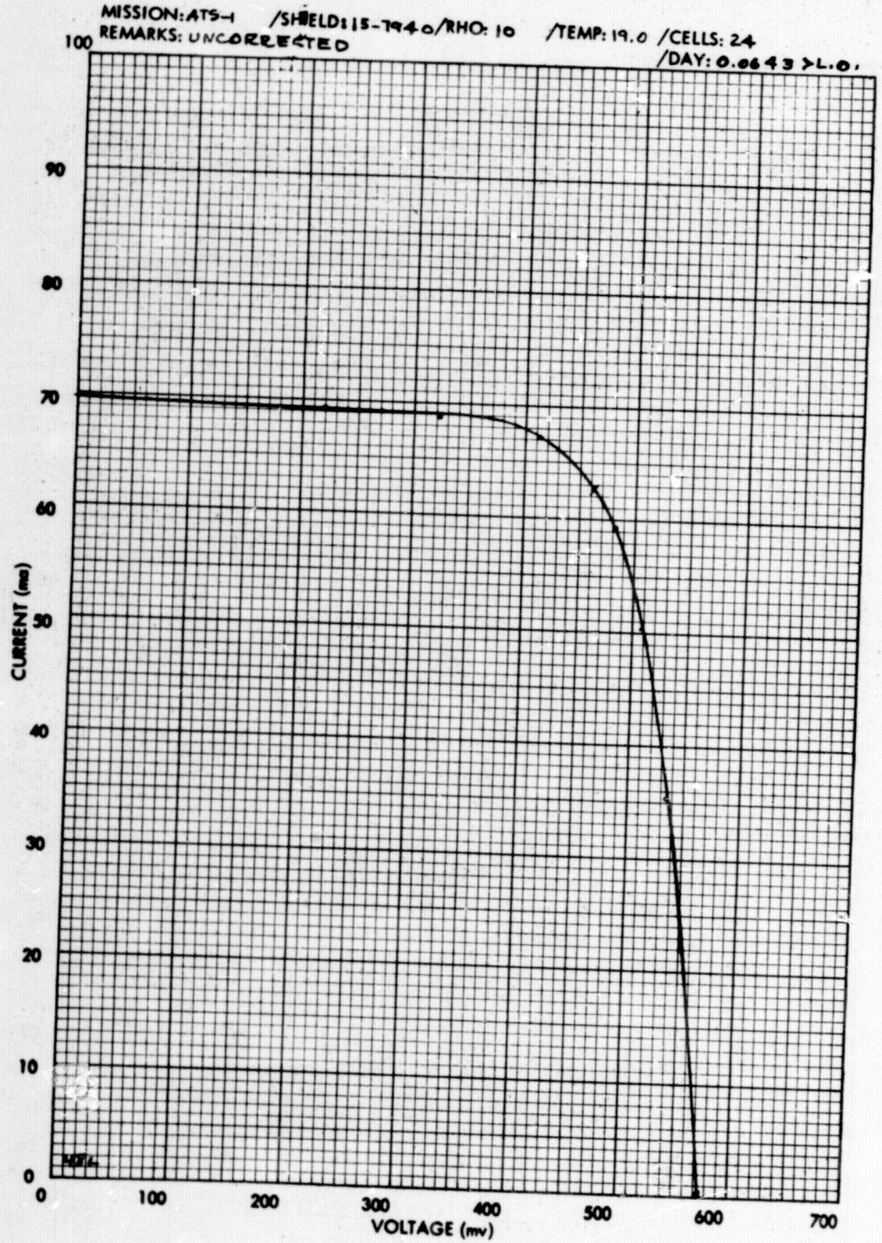


Figure 47. Cell 23, Days 100.6 and 416.8. Uncorrected Data



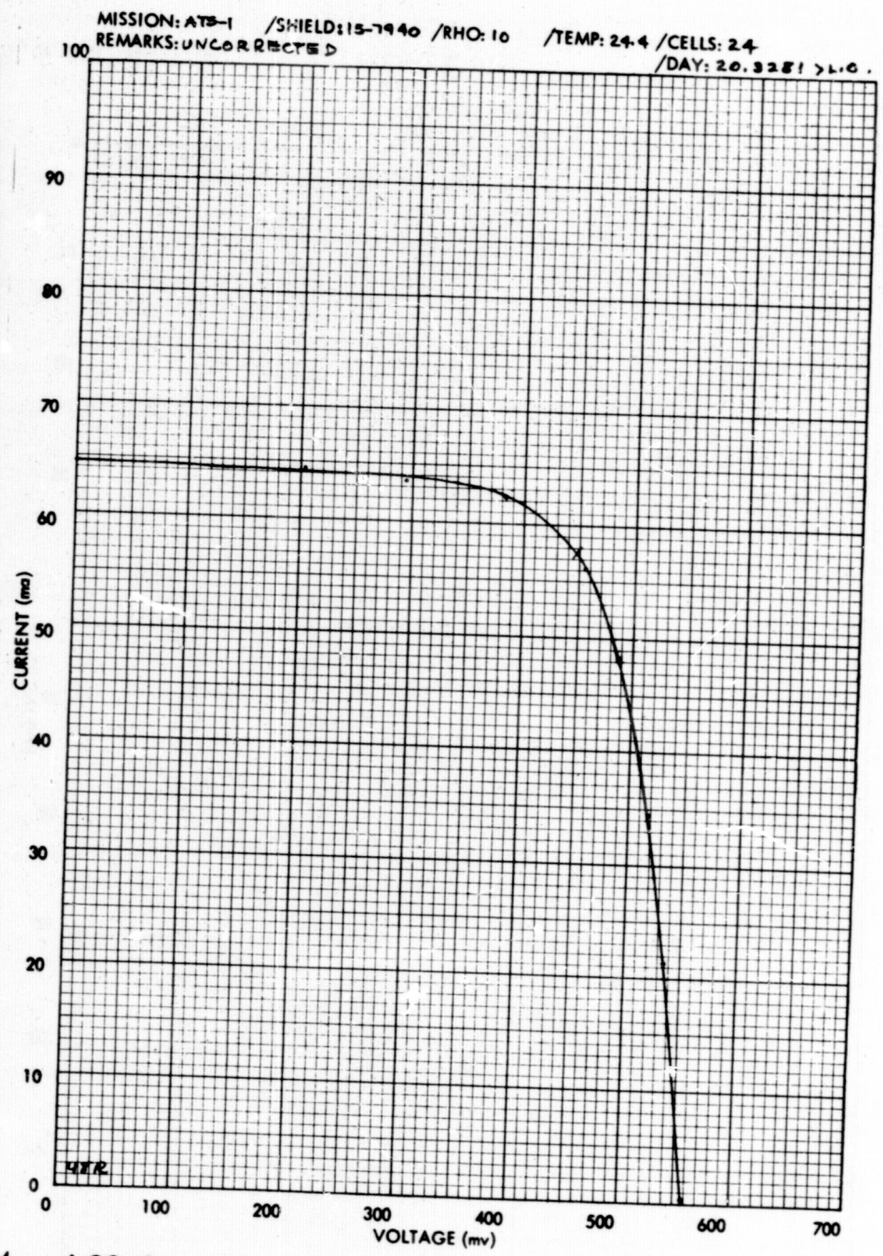
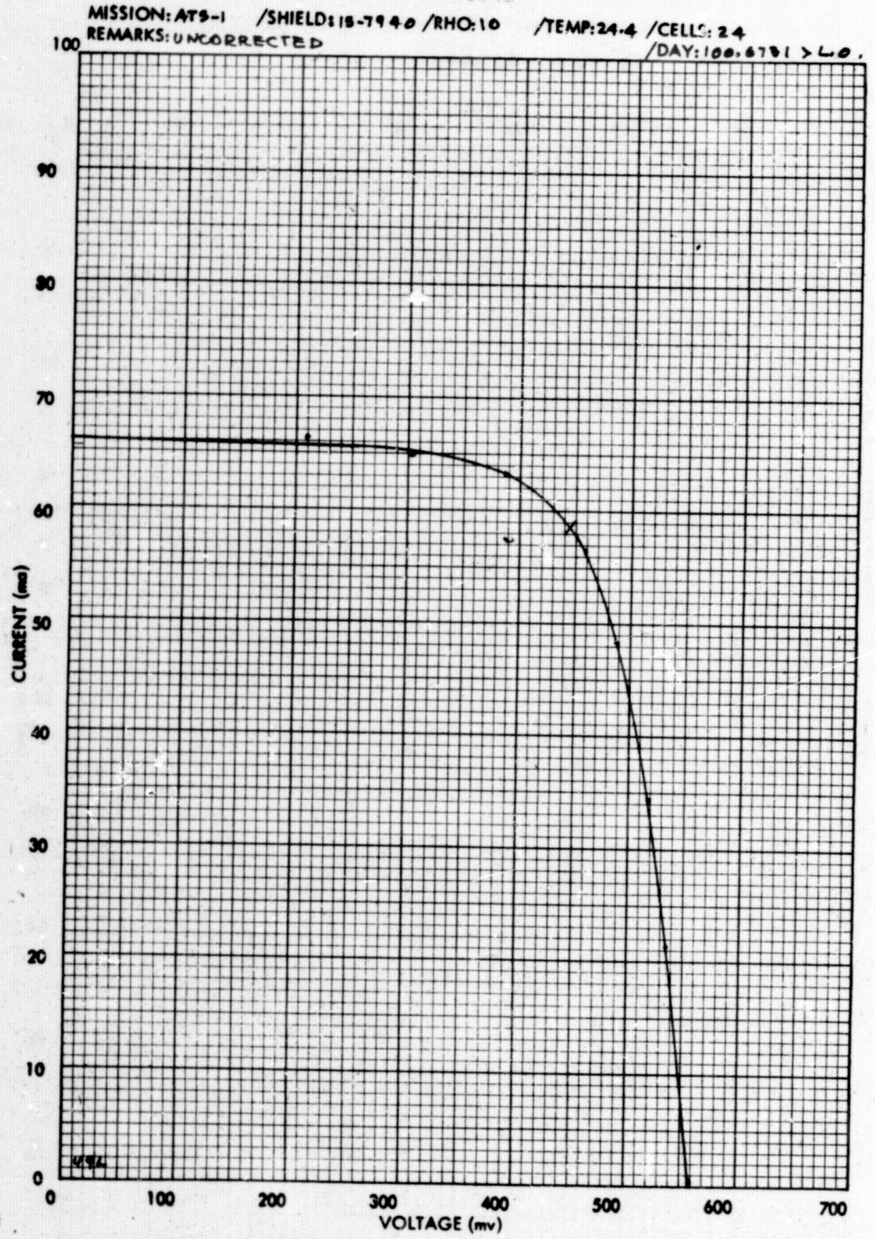


Figure 48. Cell 24, Days 0.064 and 20.3. Uncorrected Data



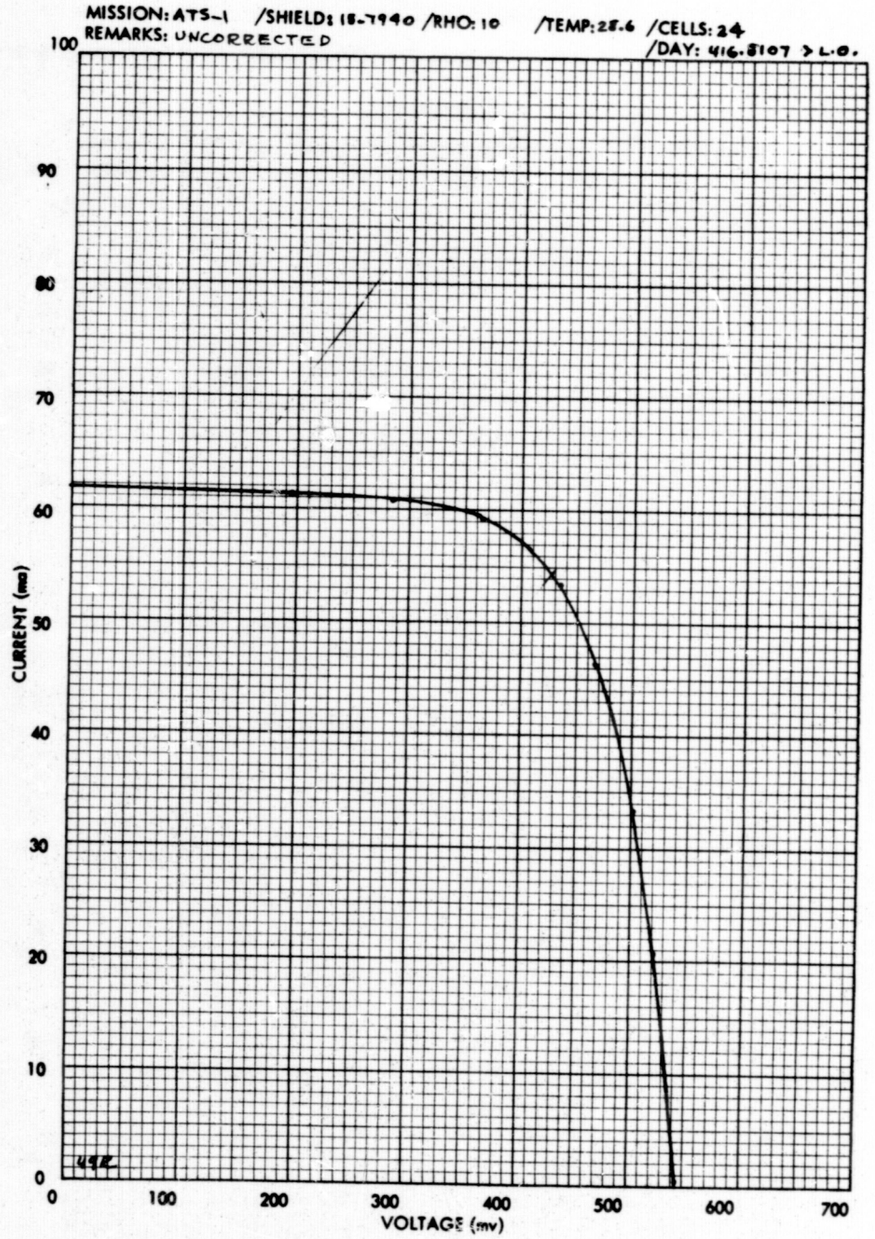
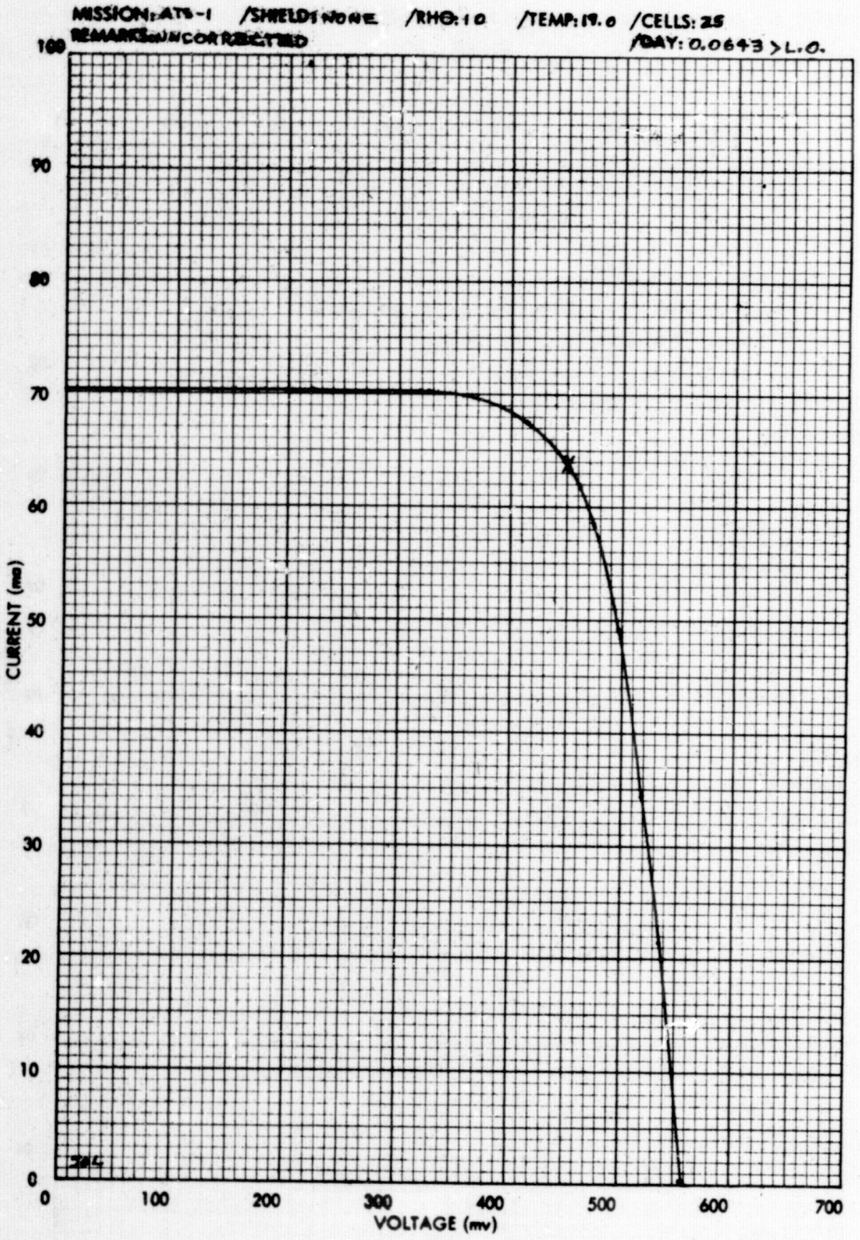


Figure 49. Cell 24, Days 100.6 and 416.8. Uncorrected Data



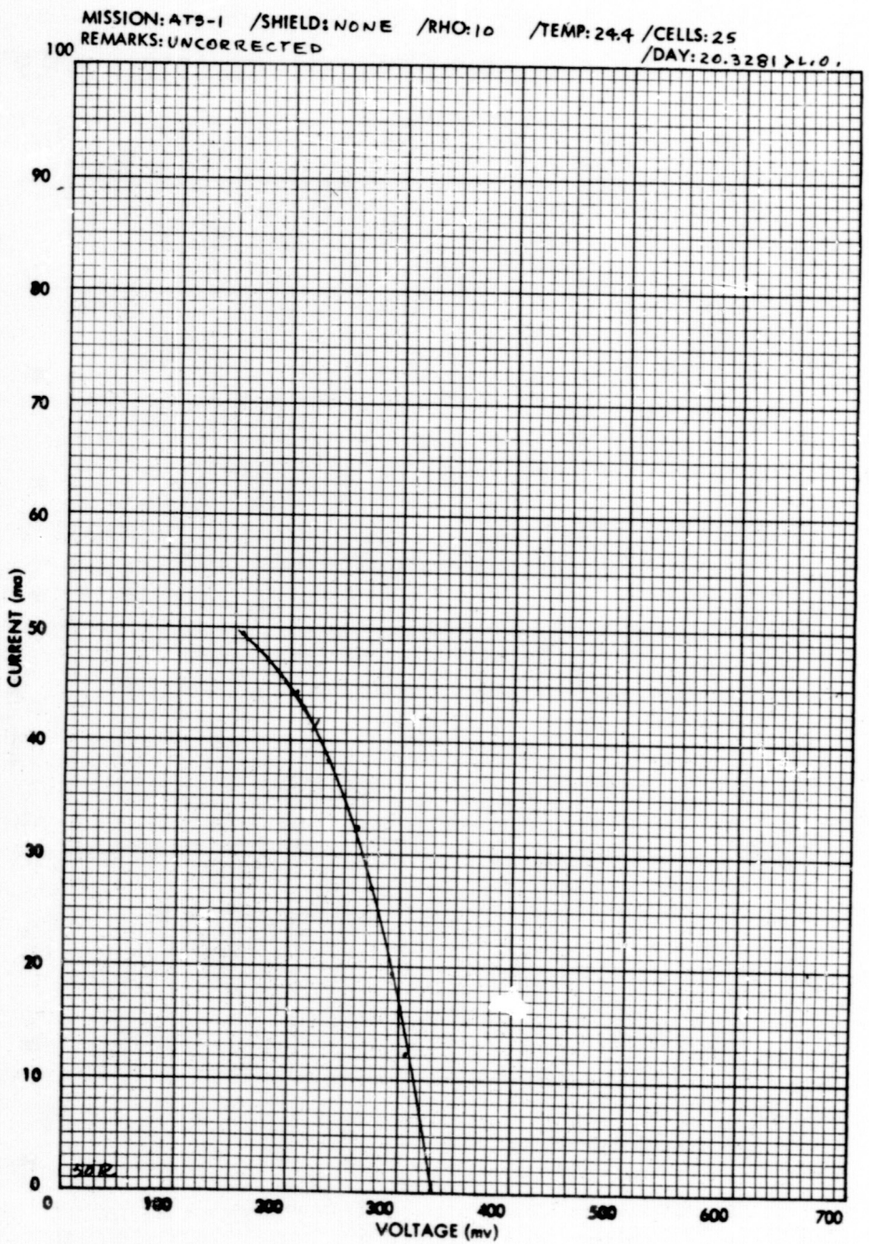
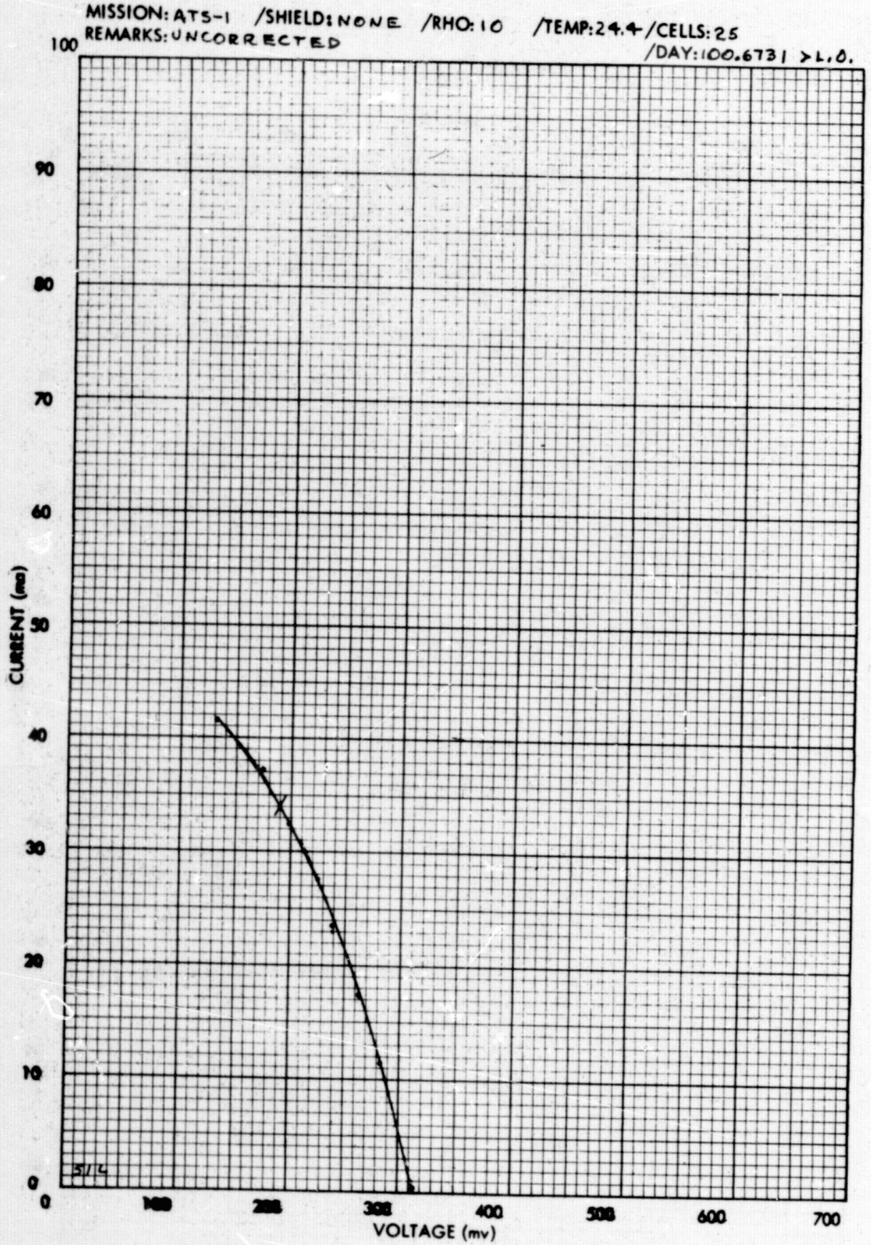


Figure 50. Cell 25, Days 0.064 and 20.3. Uncorrected Data



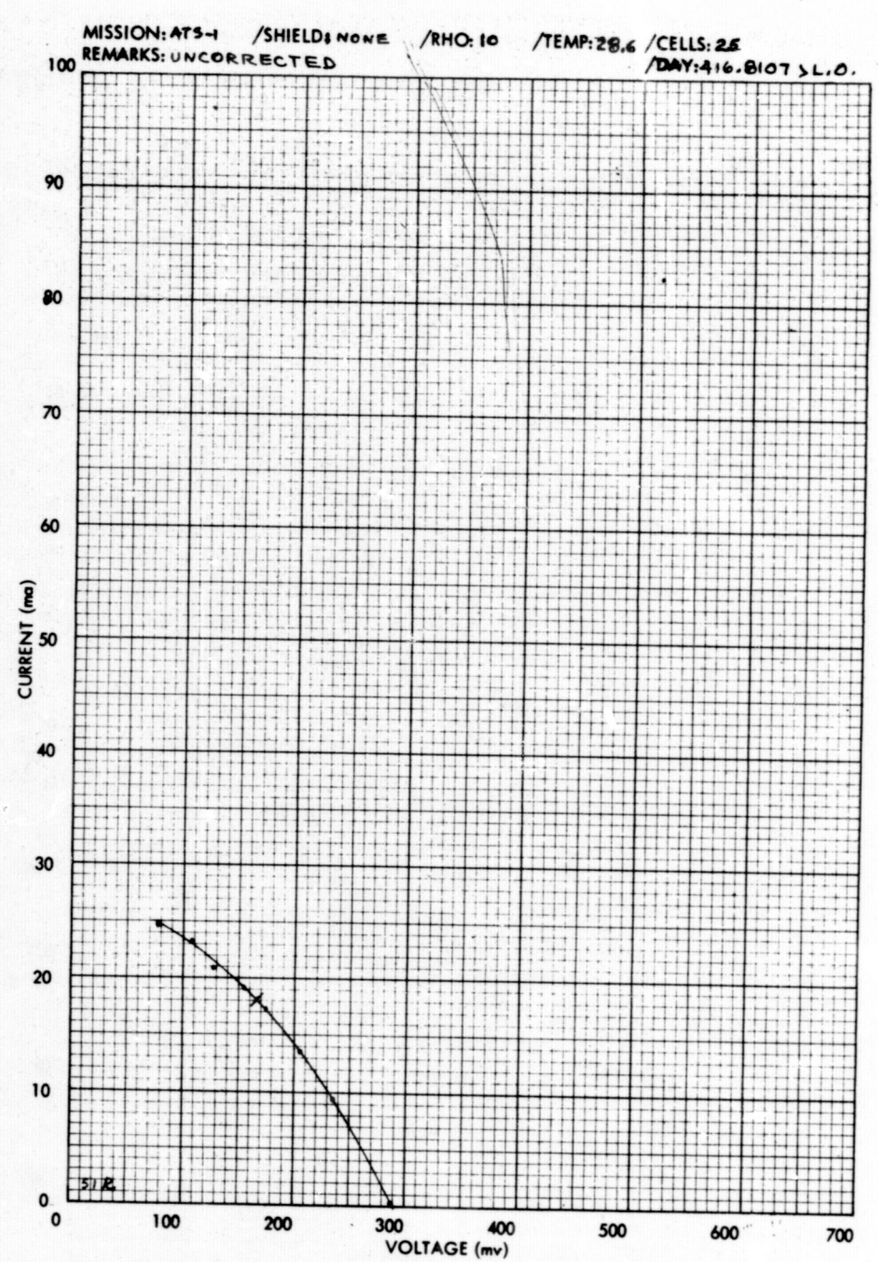
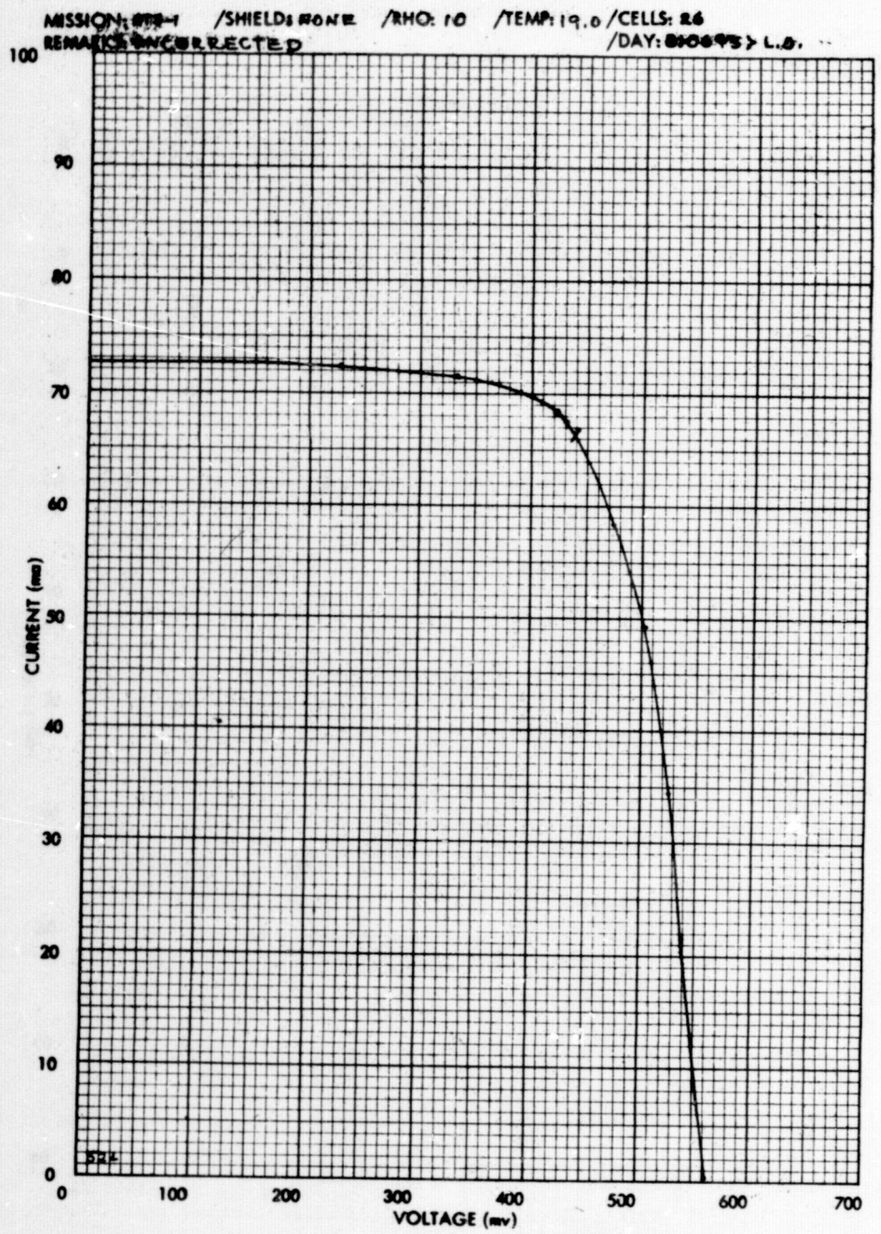


Figure 51. Cell 25, Days 100.6 and 416.8. Uncorrected Data



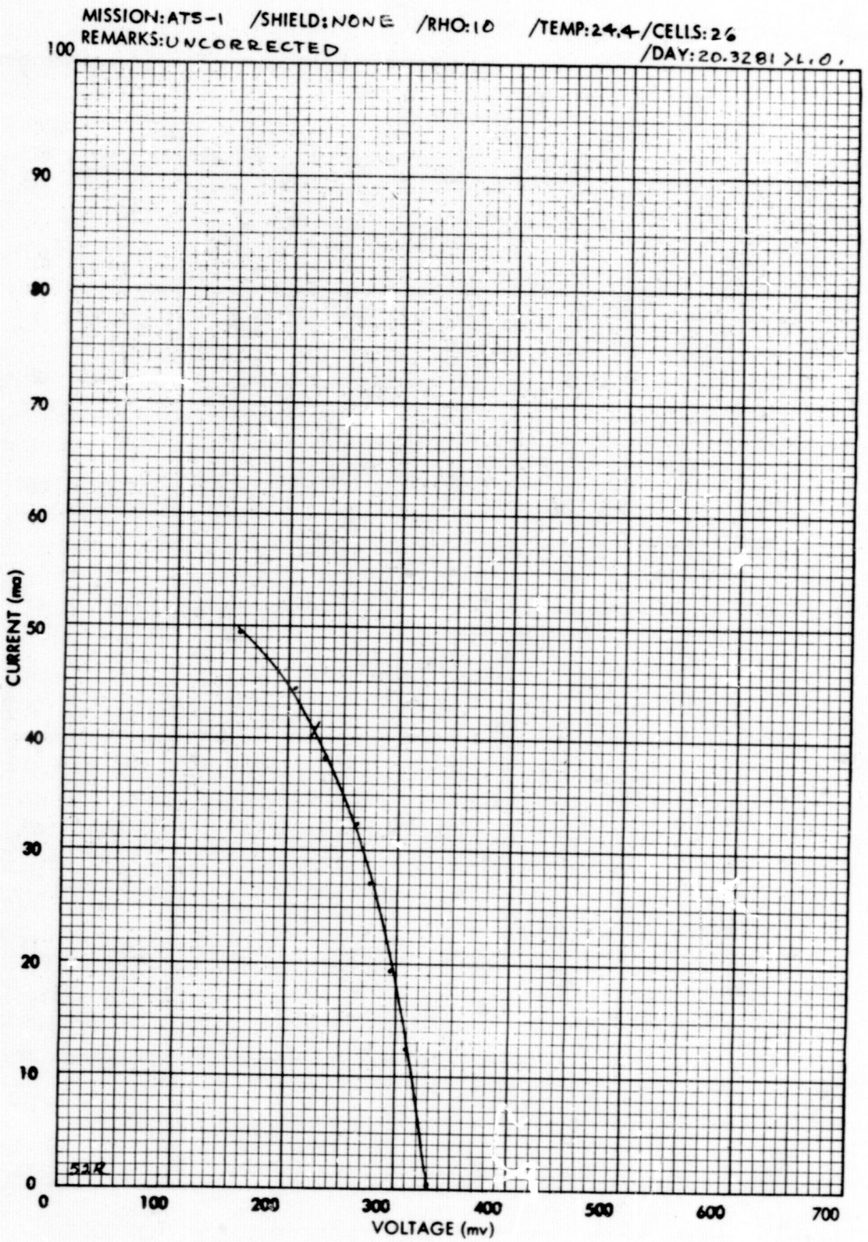
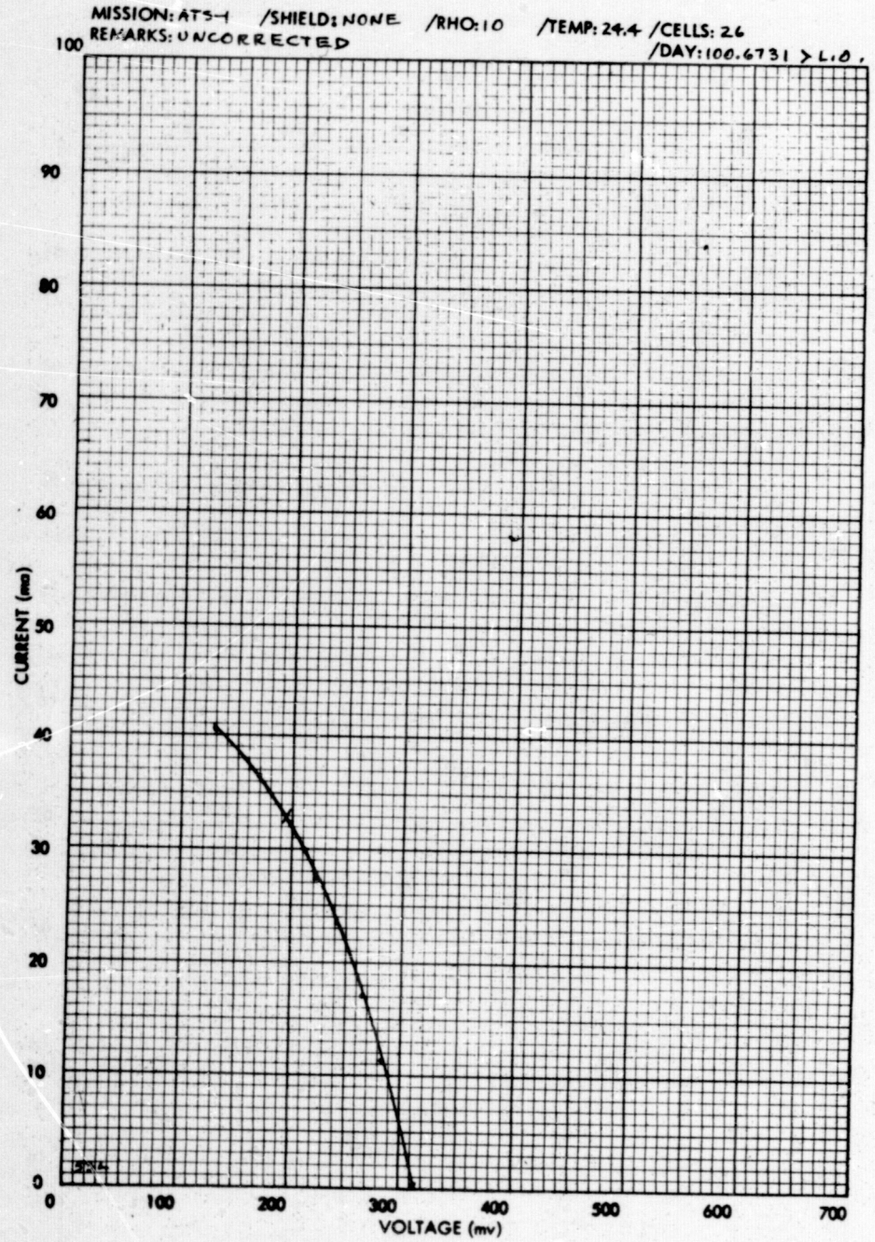


Figure 52. Cell 26, Days 0.064 and 20.3. Uncorrected Data



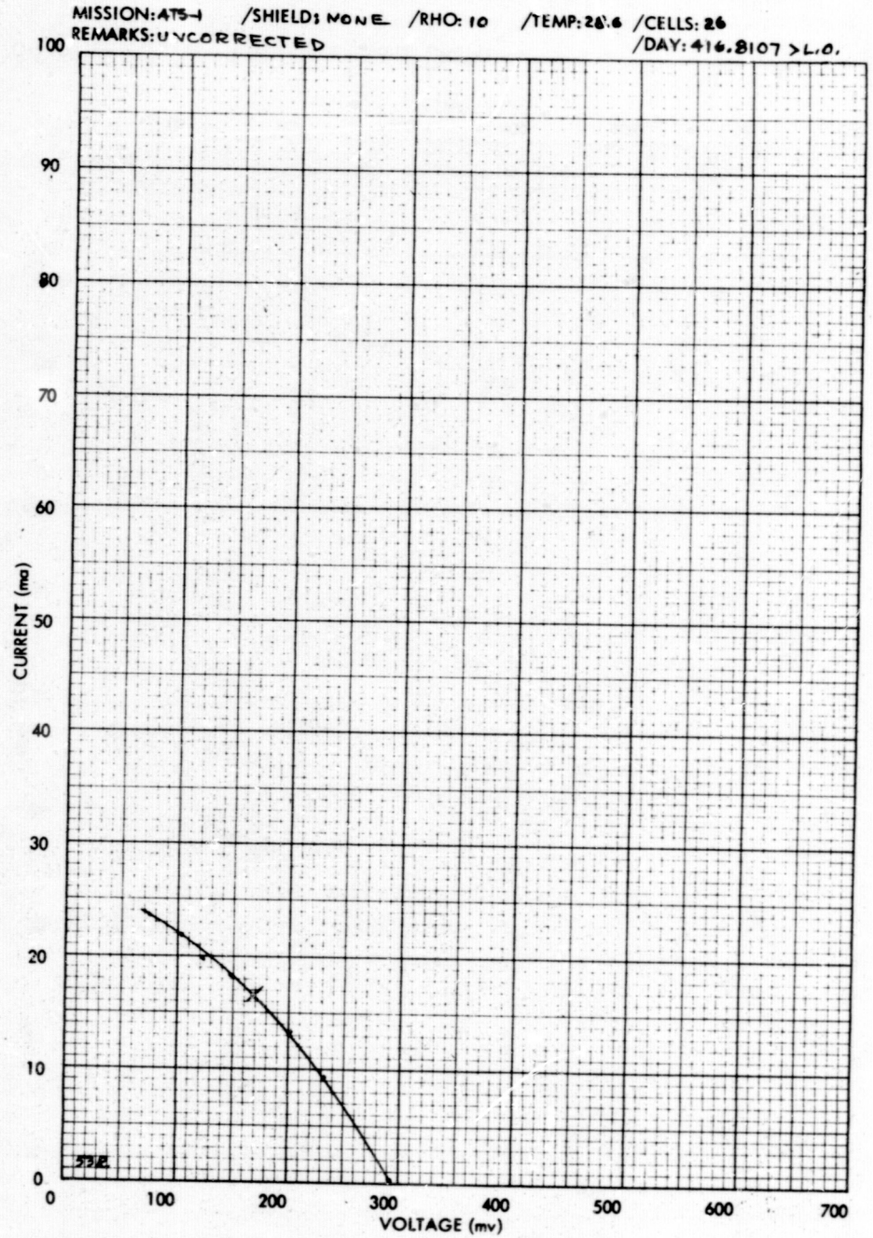
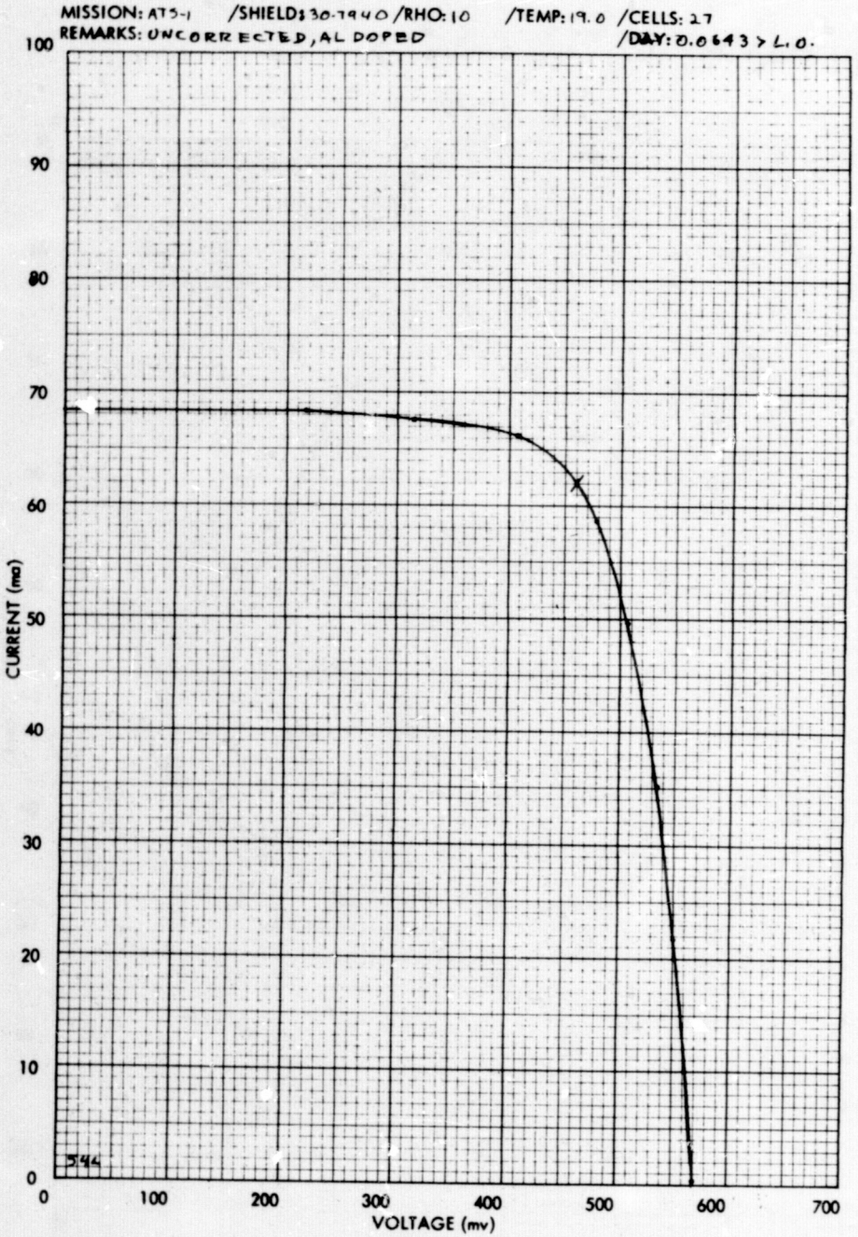


Figure 53. Cell 26, Days 100.6 and 416.8. Uncorrected Data



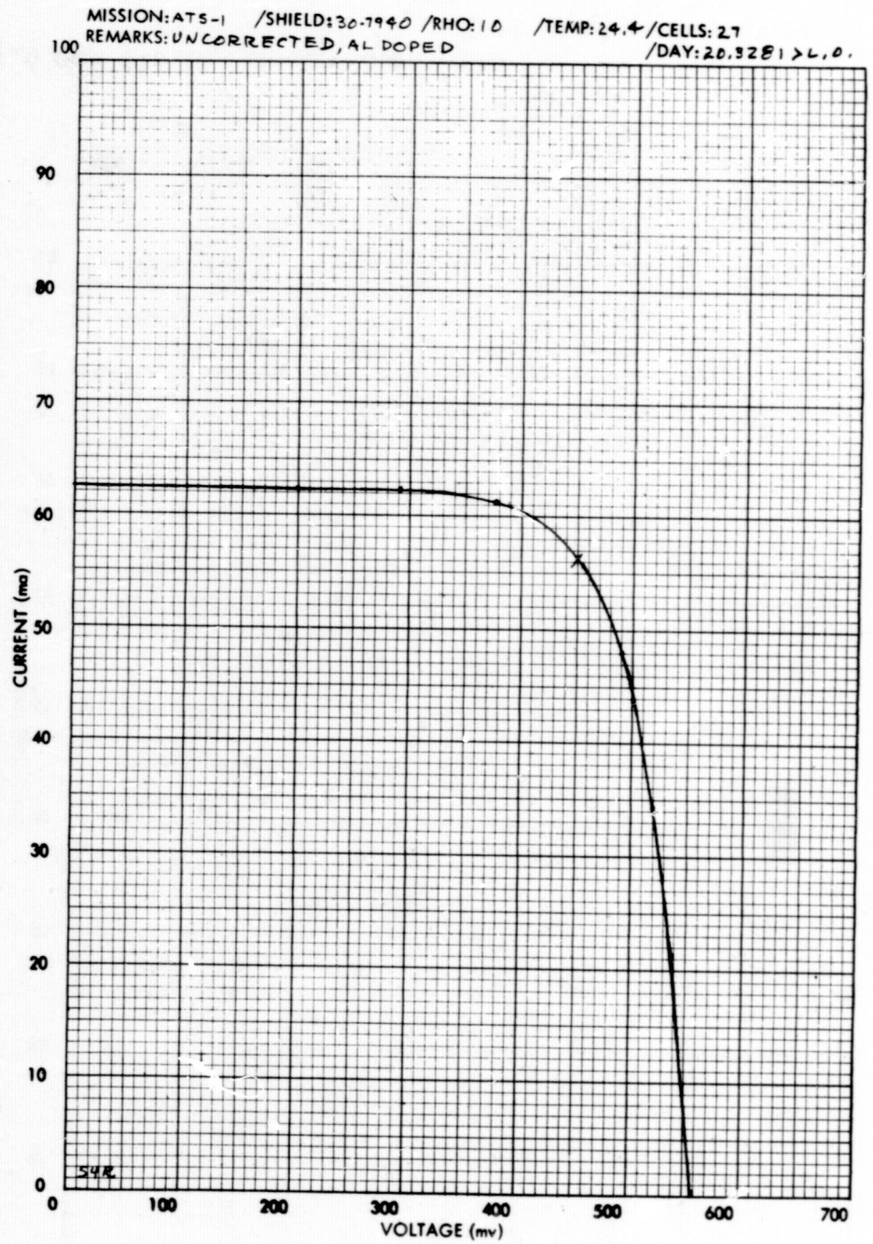
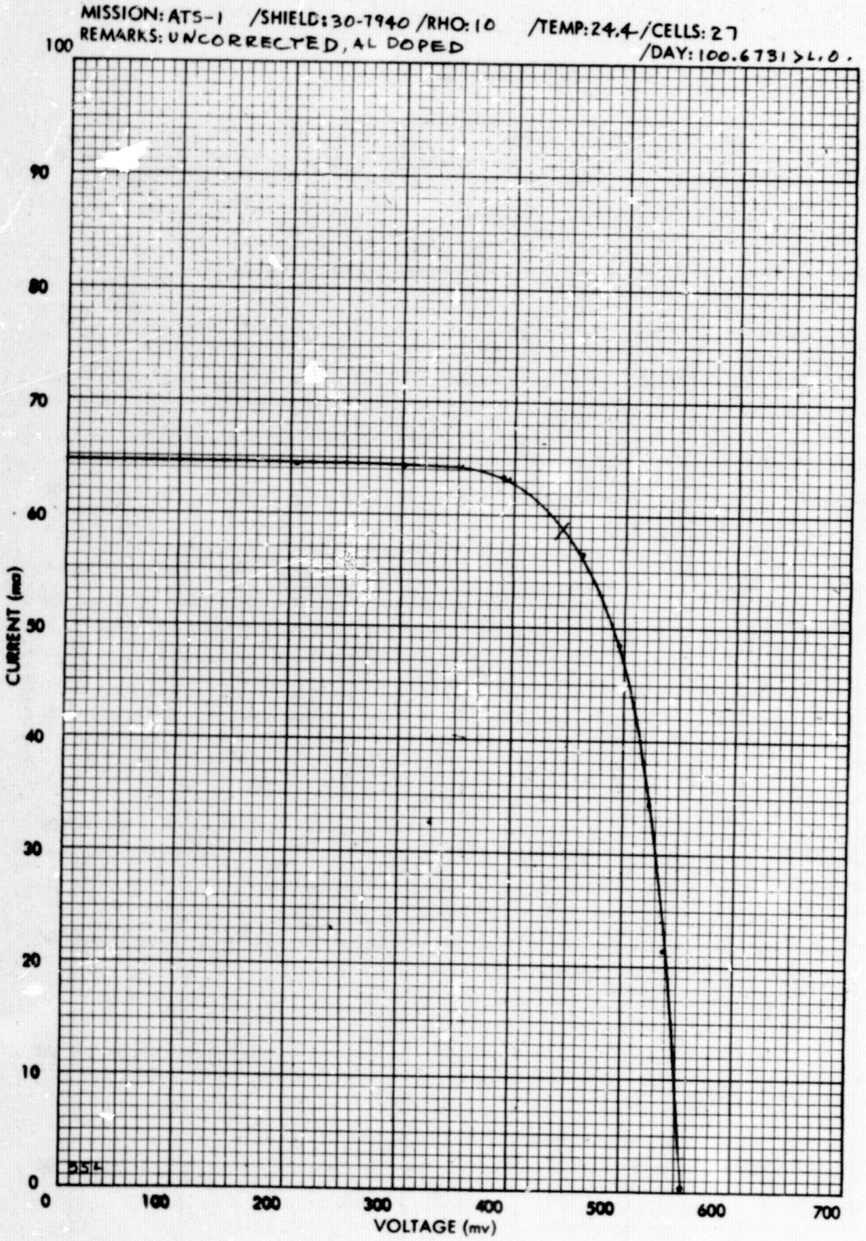


Figure 54. Cell 27, Days 0.064 and 20.3. Uncorrected Data



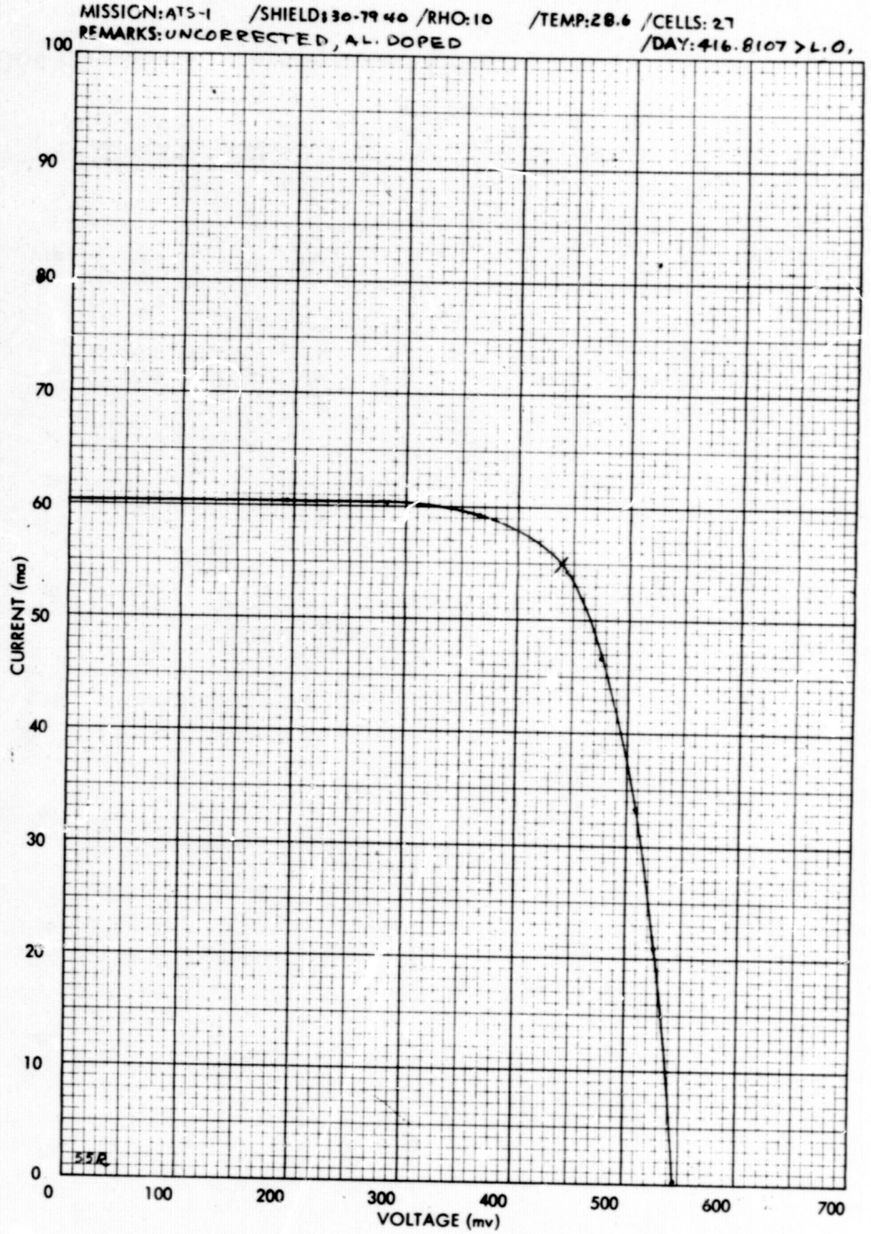
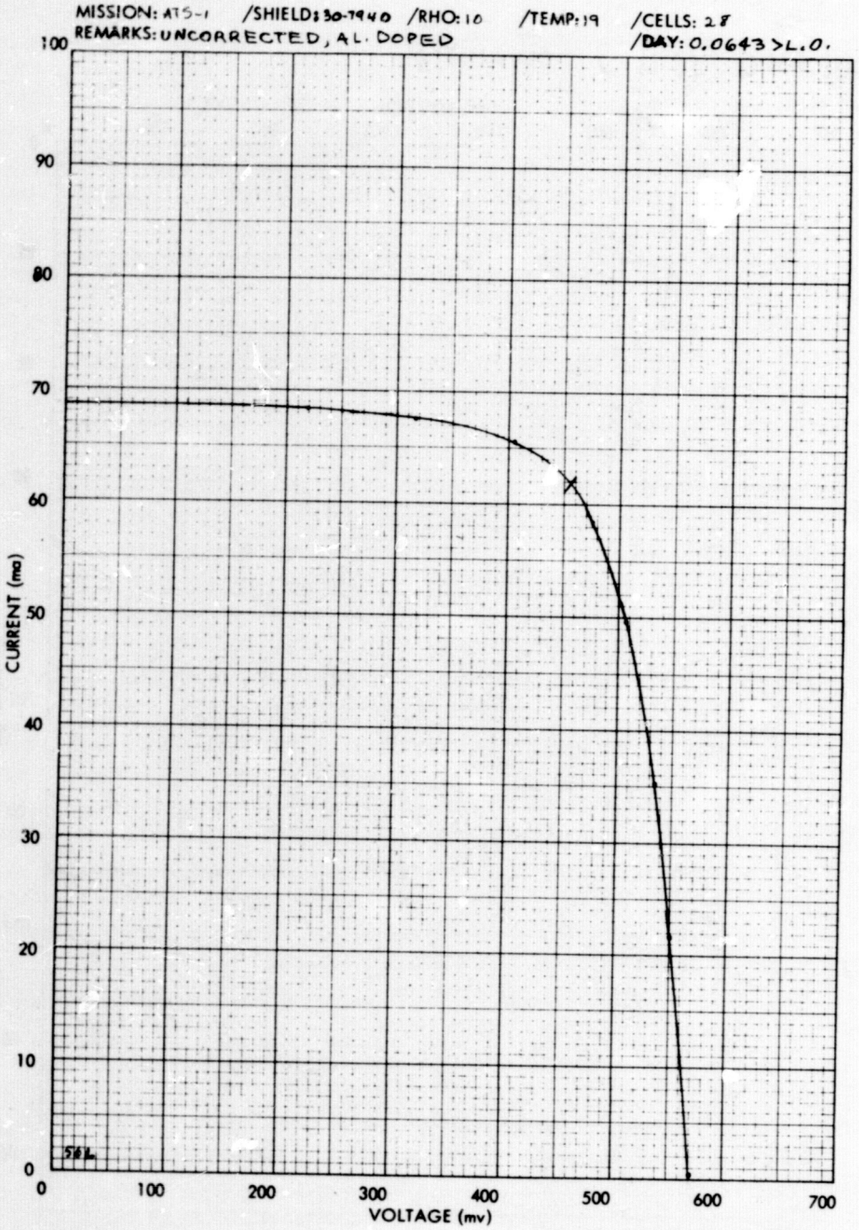


Figure 55. Cell 27, Days 100.6 and 416.8. Uncorrected Data



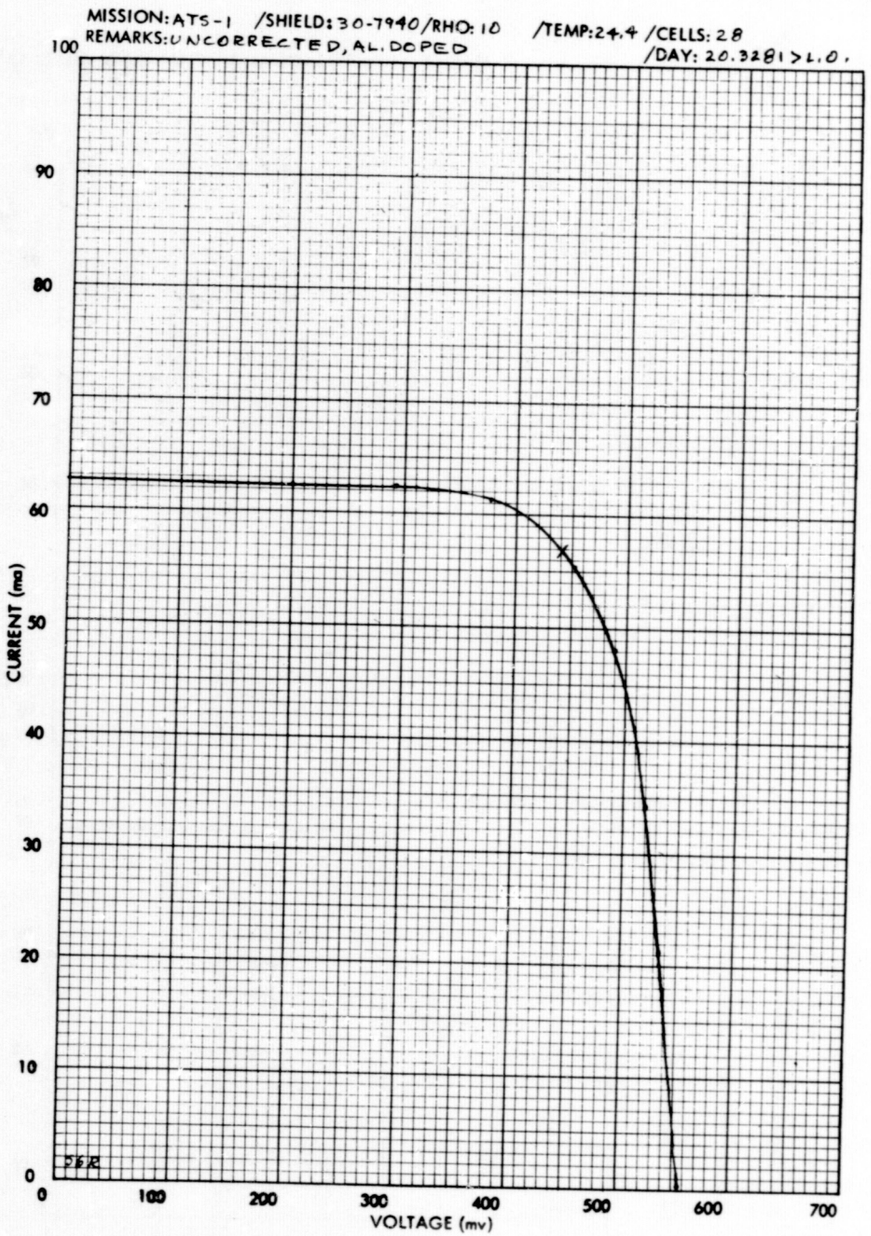
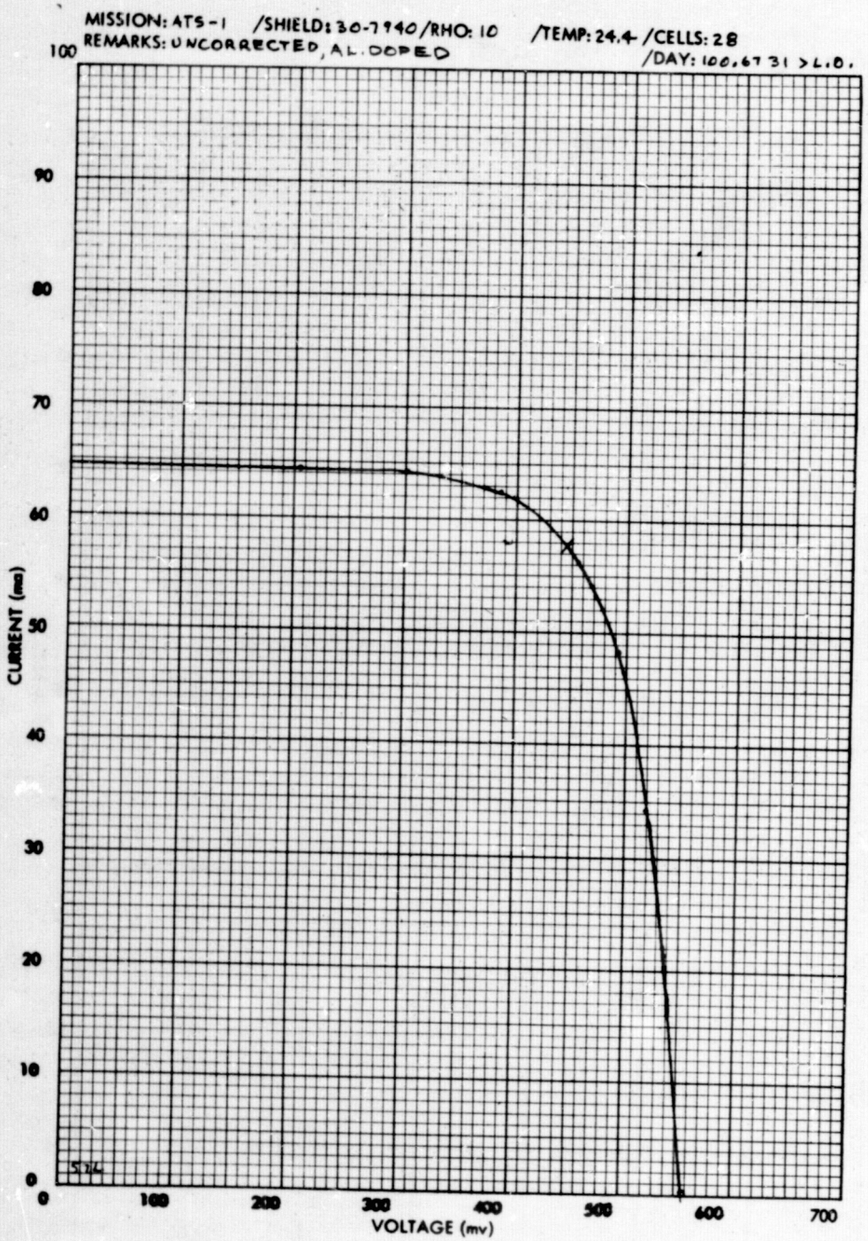


Figure 56. Cell 28, Days 0.064 and 20.3. Uncorrected Data



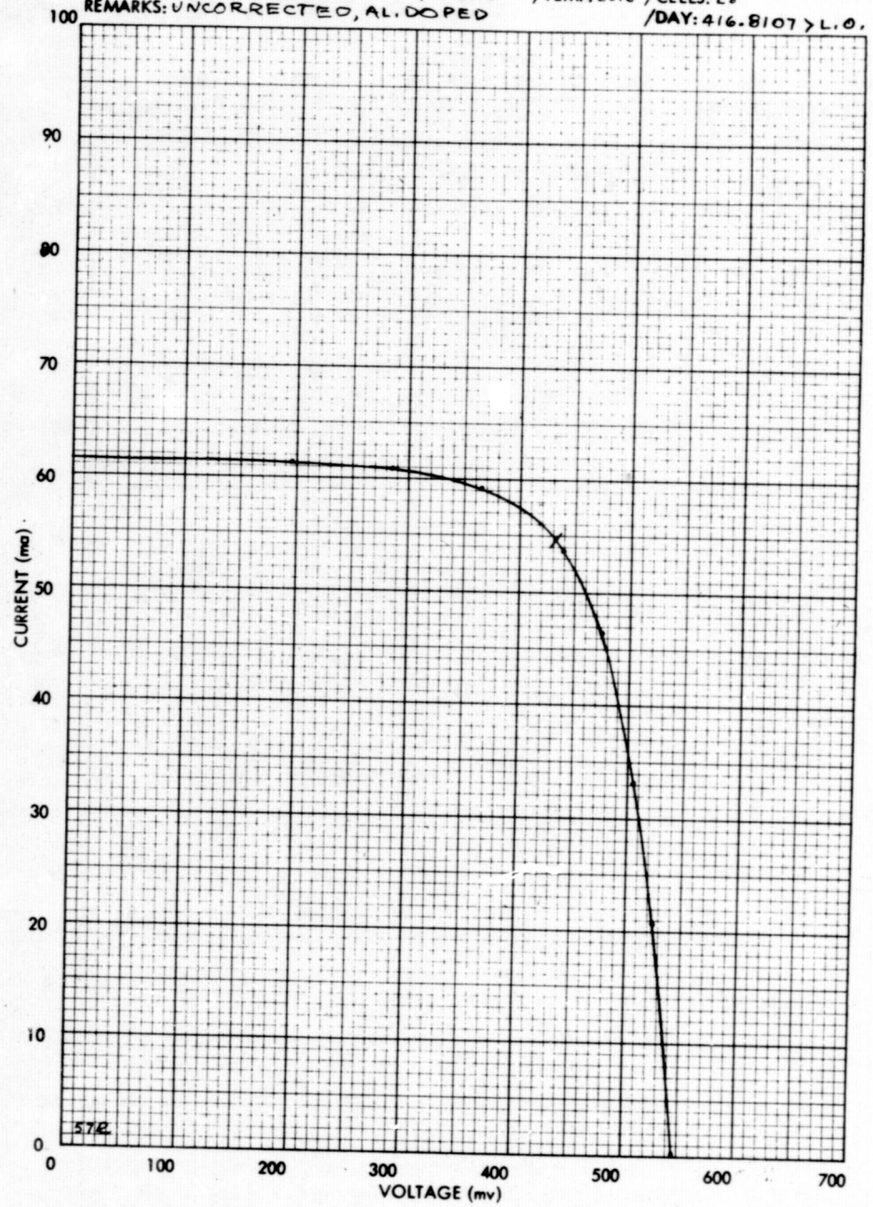
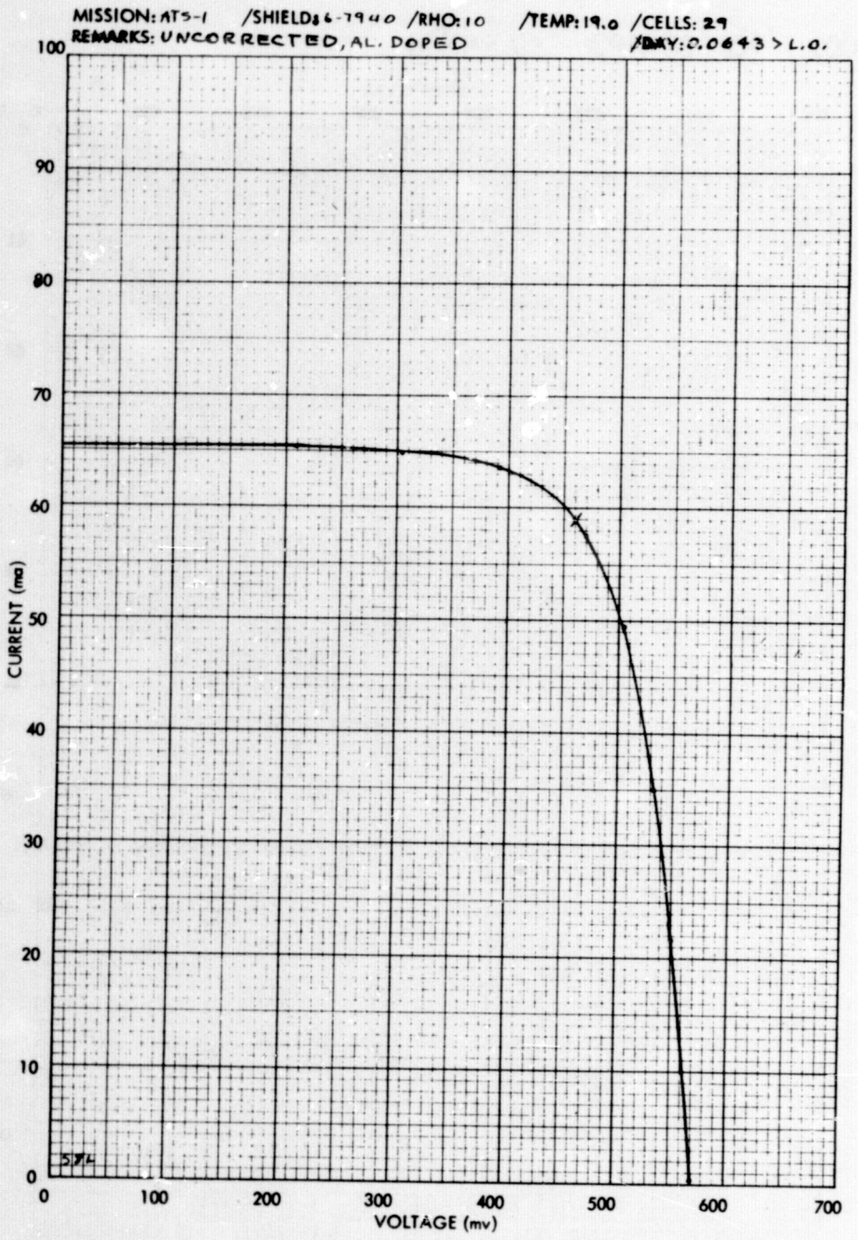


Figure 57. Cell 28, Days 100.6 and 416.8. Uncorrected Data



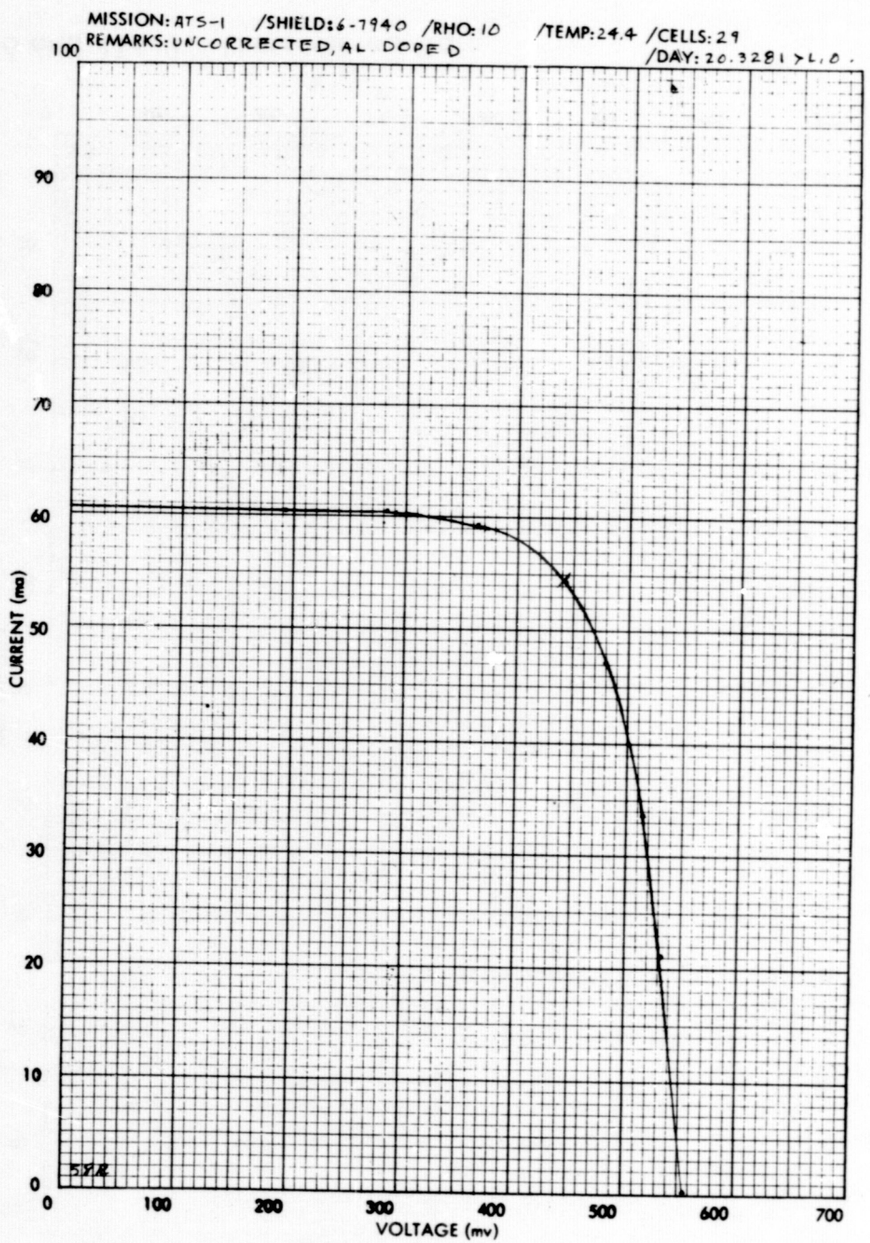
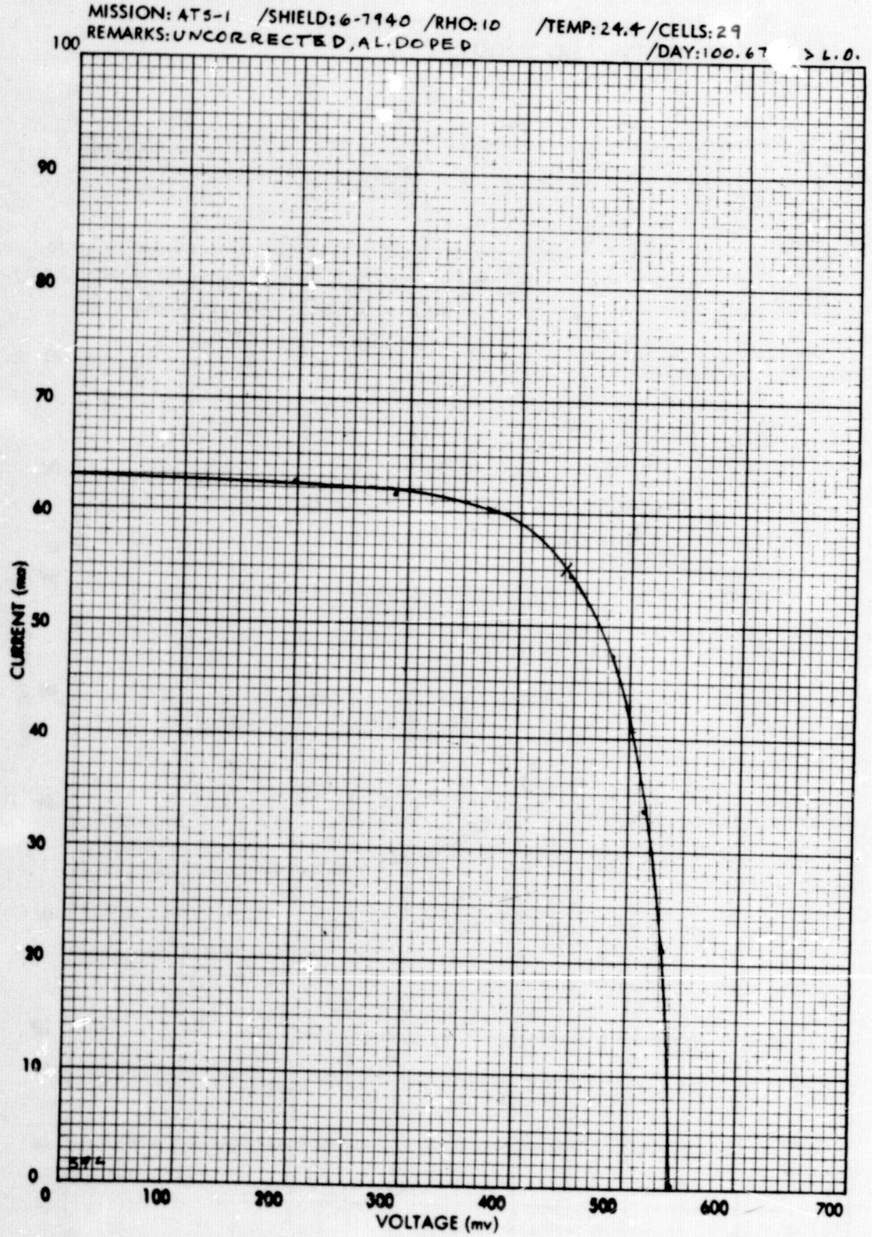


Figure 58. Cell 29, Days 0.064 and 20.3. Uncorrected Data



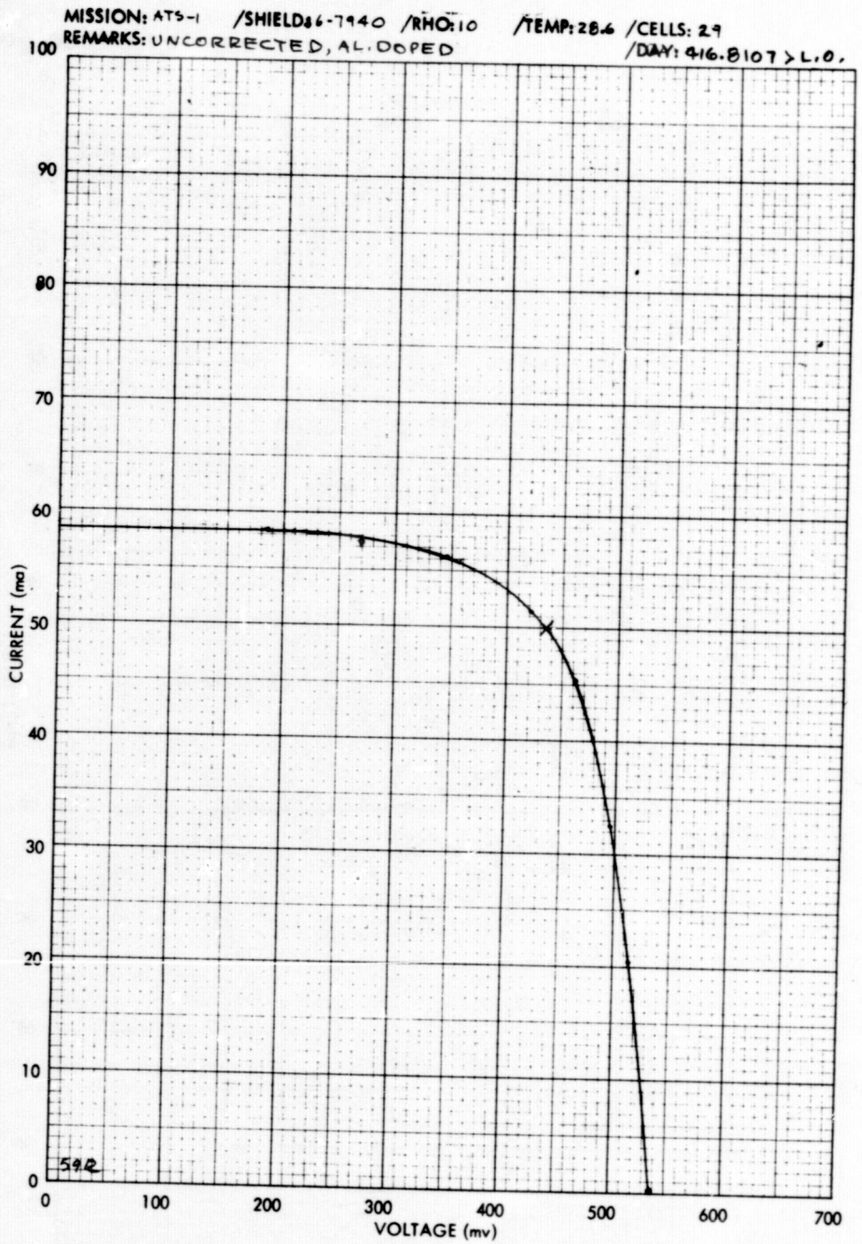
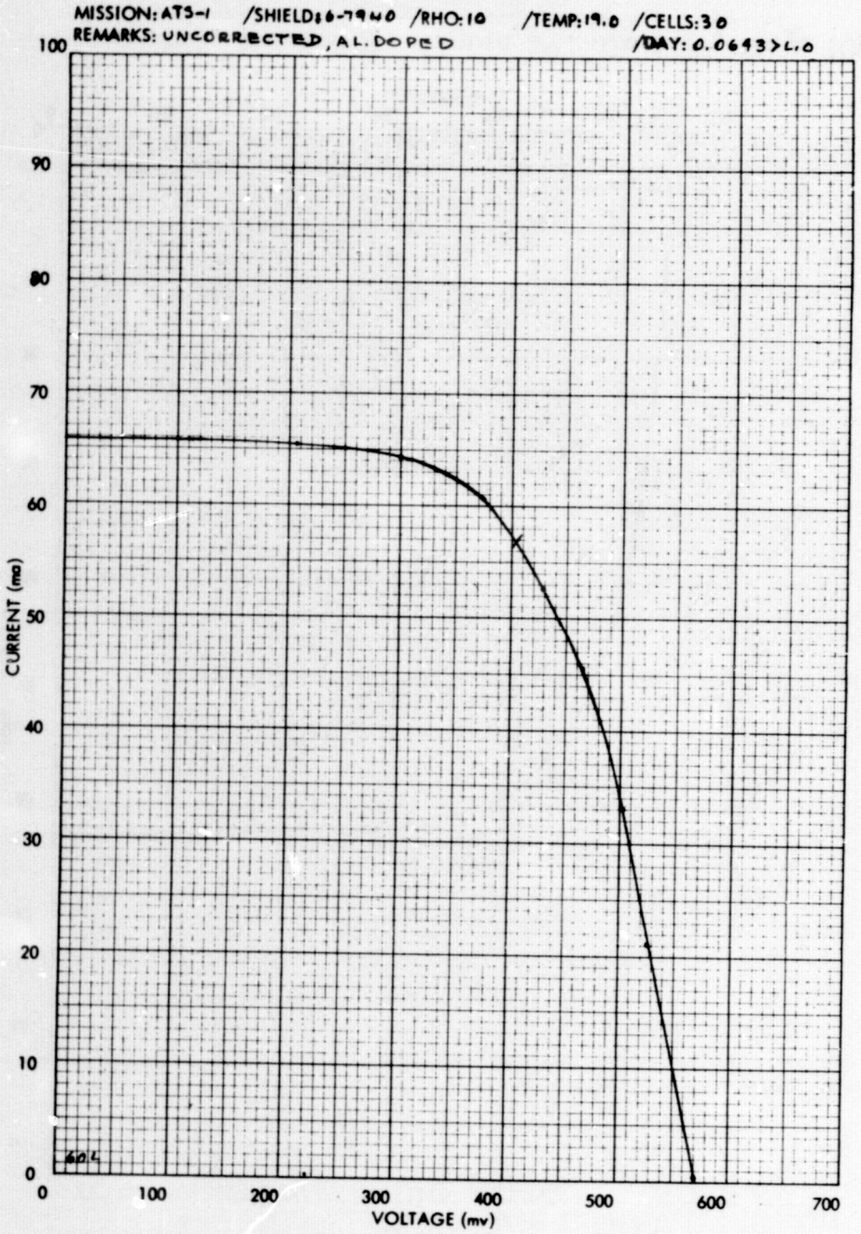


Figure 59. Cell 29, Days 100.6 and 416.8. Uncorrected Data



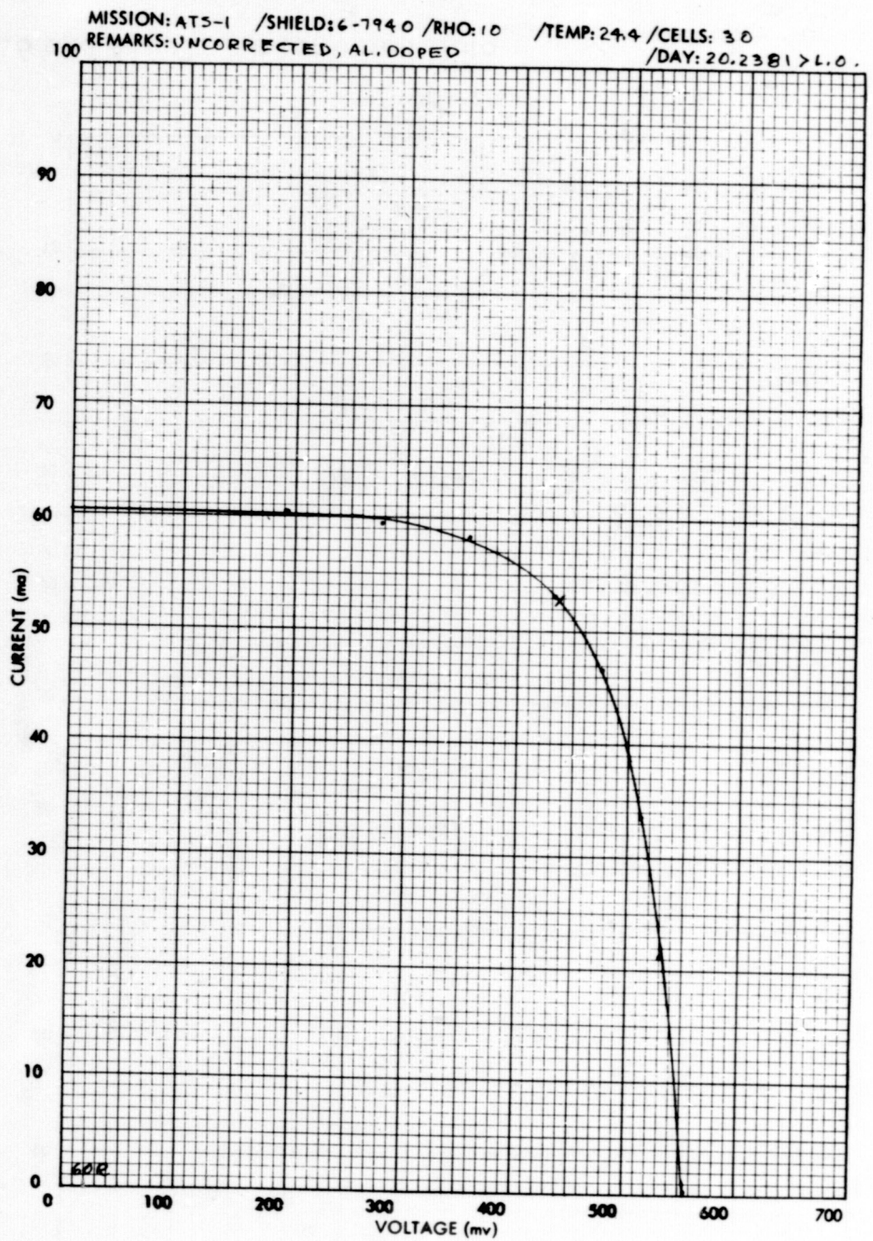
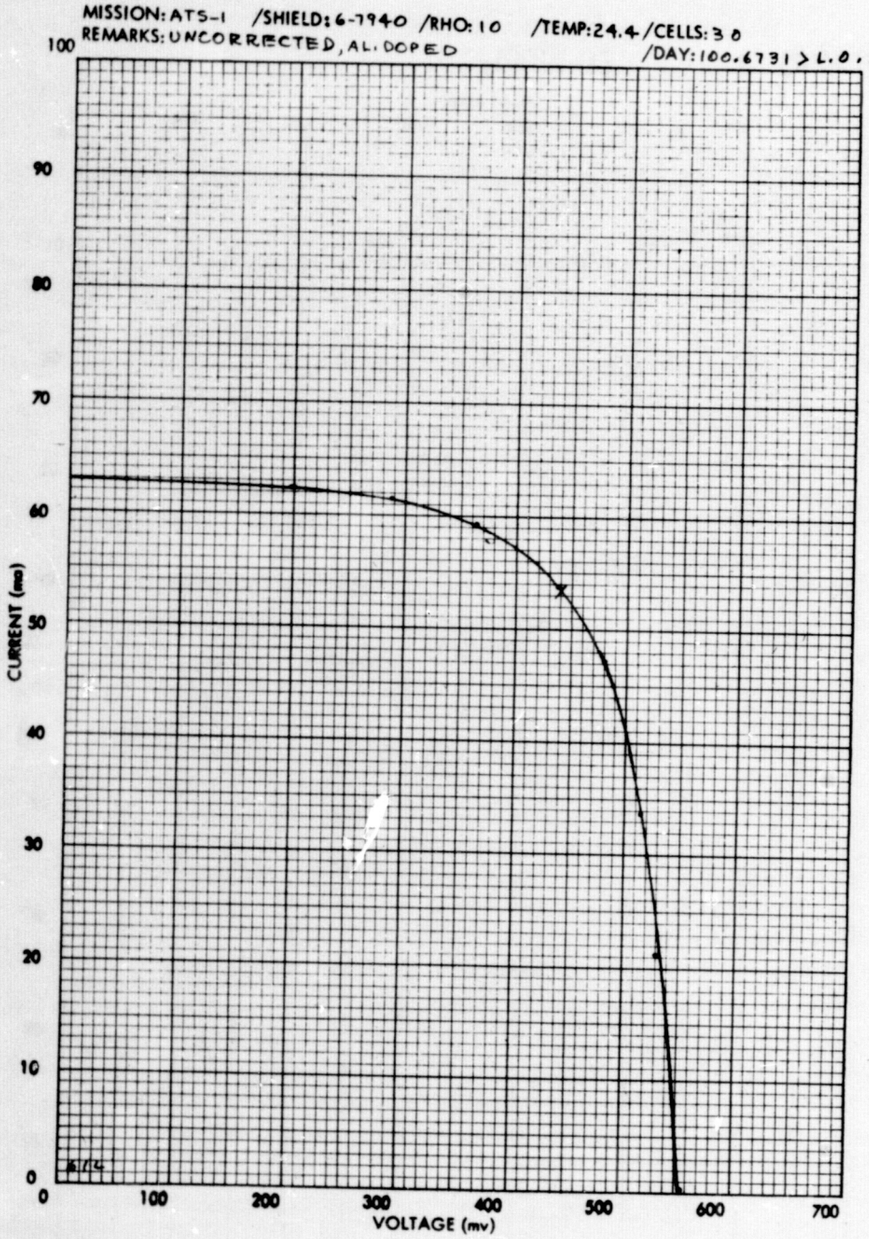


Figure 60. Cell 30, Days 0.064 and 20.3. Uncorrected Data



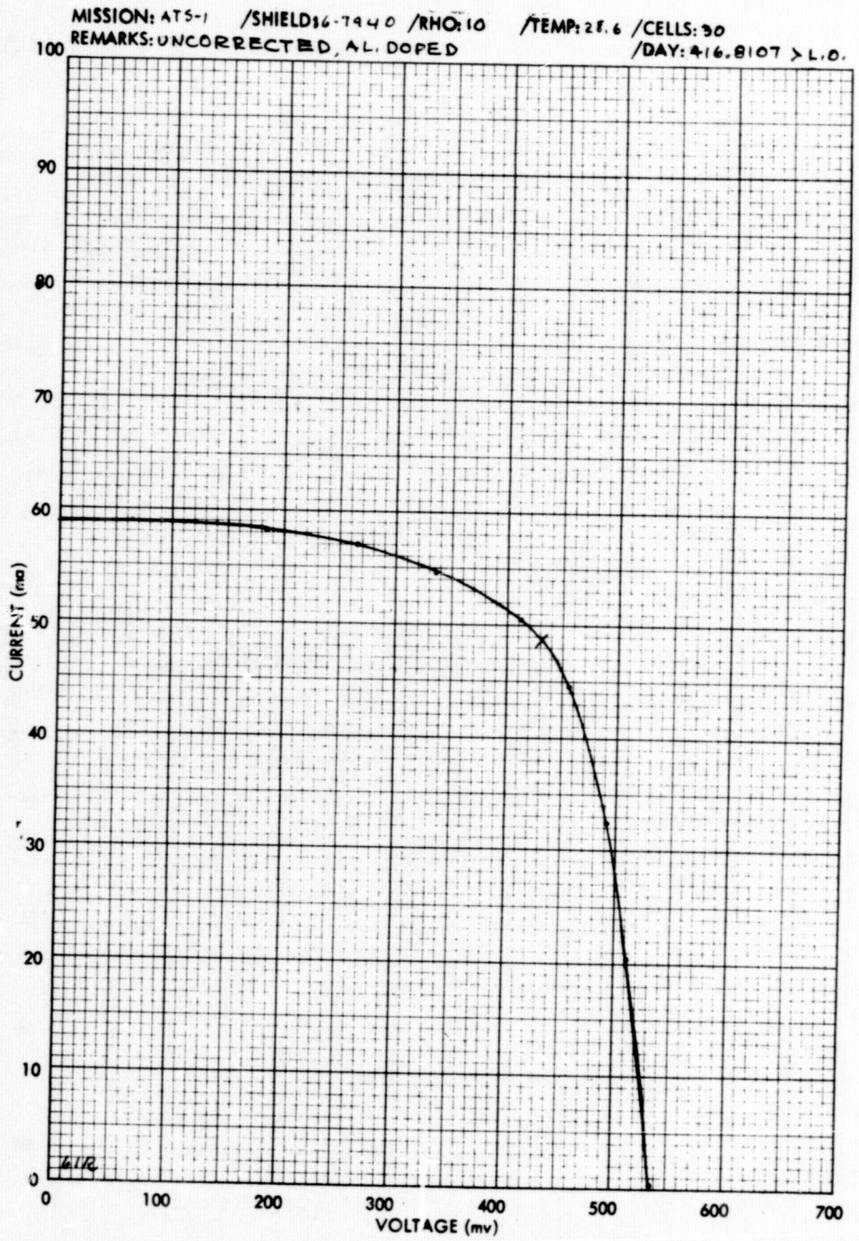
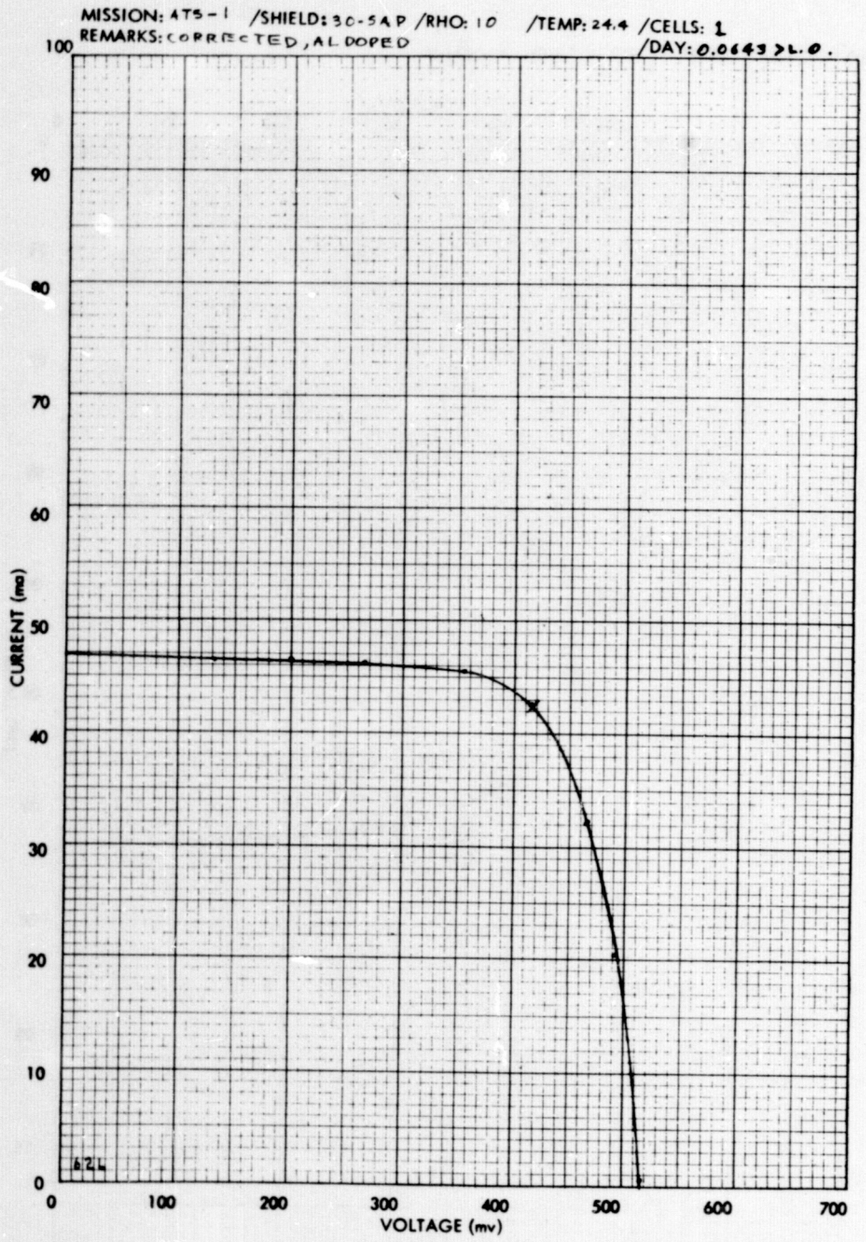


Figure 61. Cell 30, Days 100.6 and 416.8. Uncorrected Data



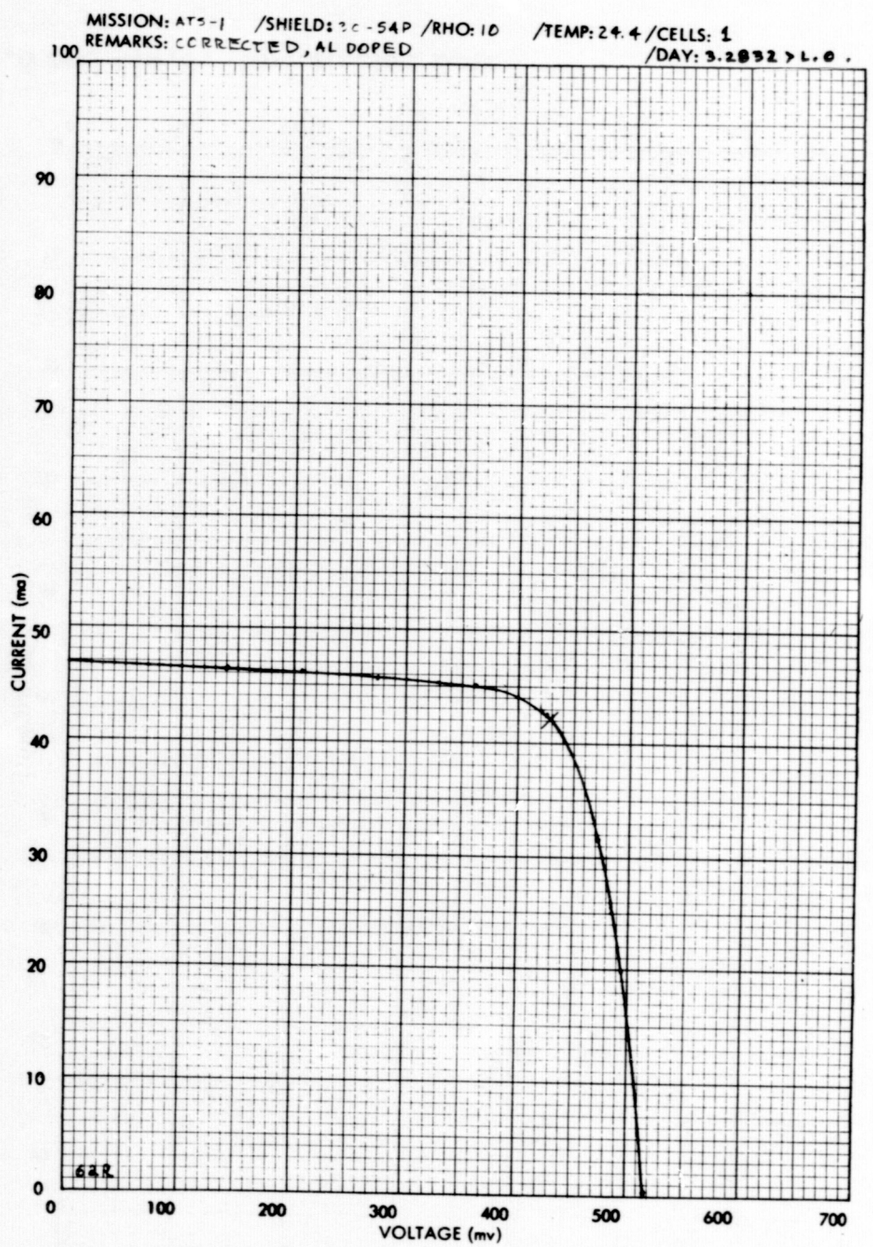
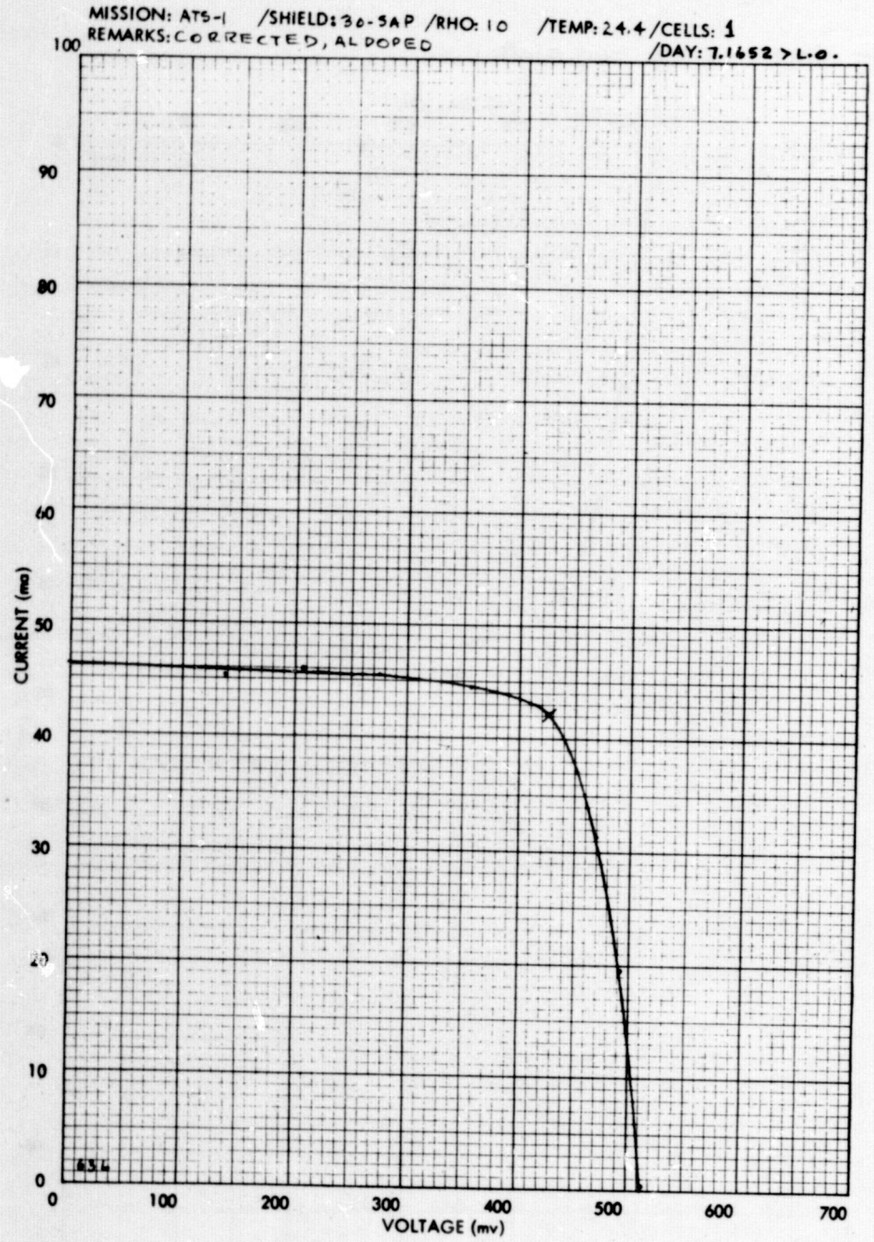


Figure 62. Cell 1, Days 0.064 and 3.2. Corrected Data



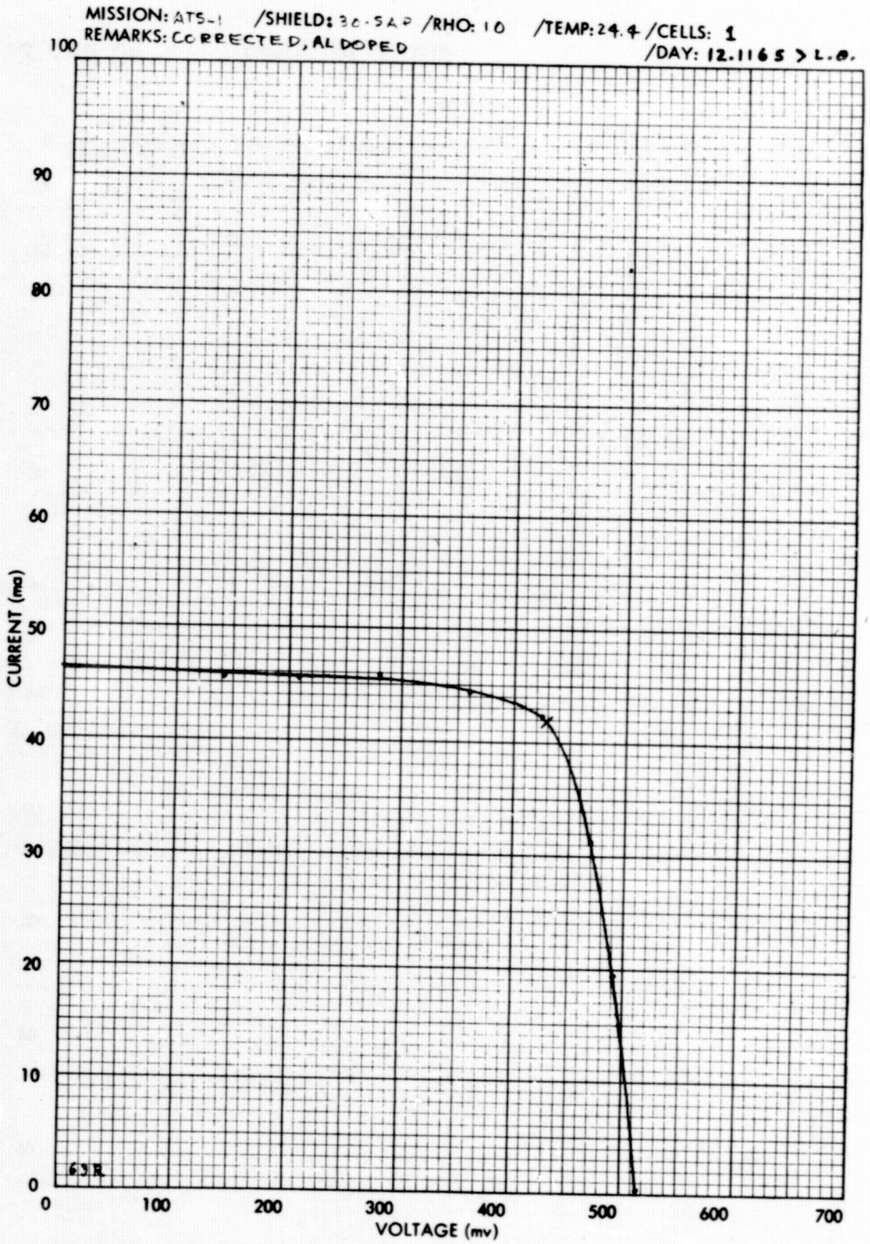
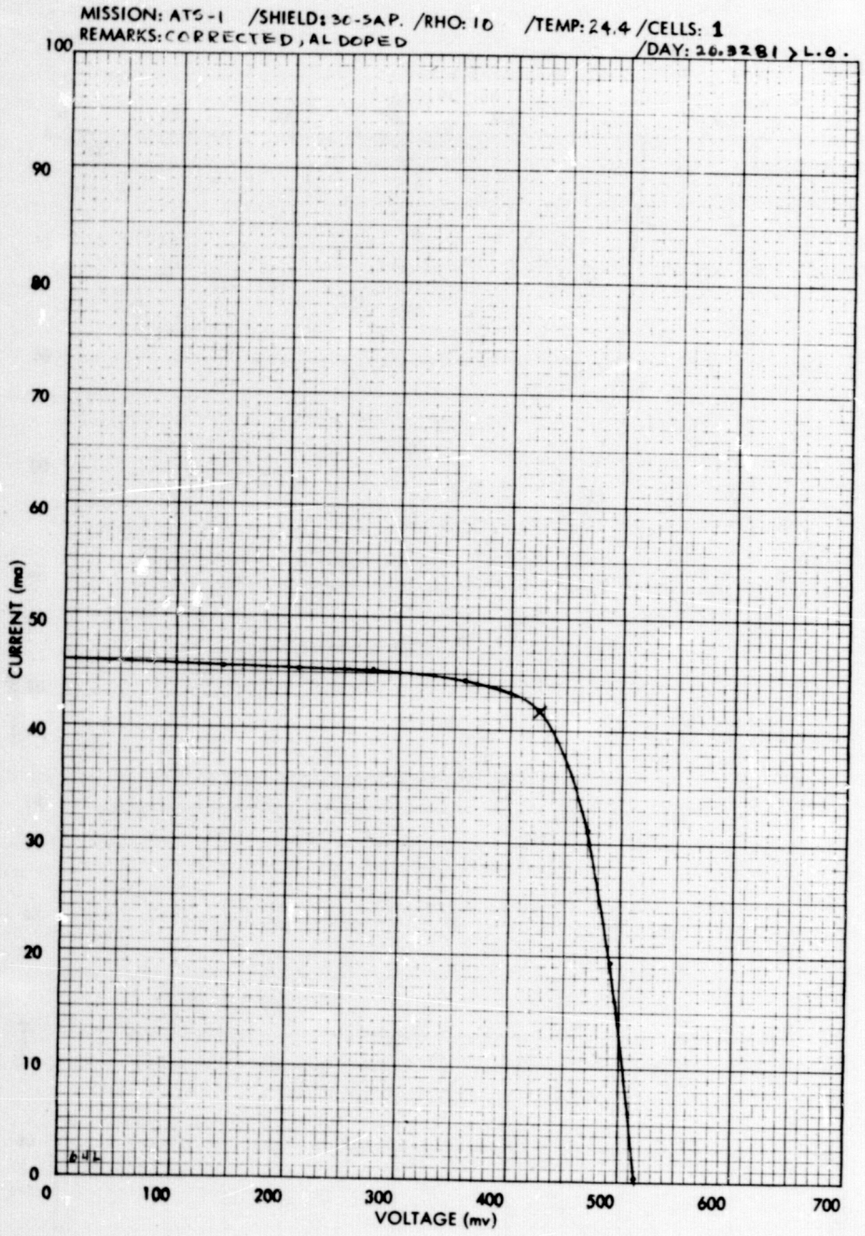


Figure 63. Cell 1, Days 7.1 and 12.1. Corrected Data



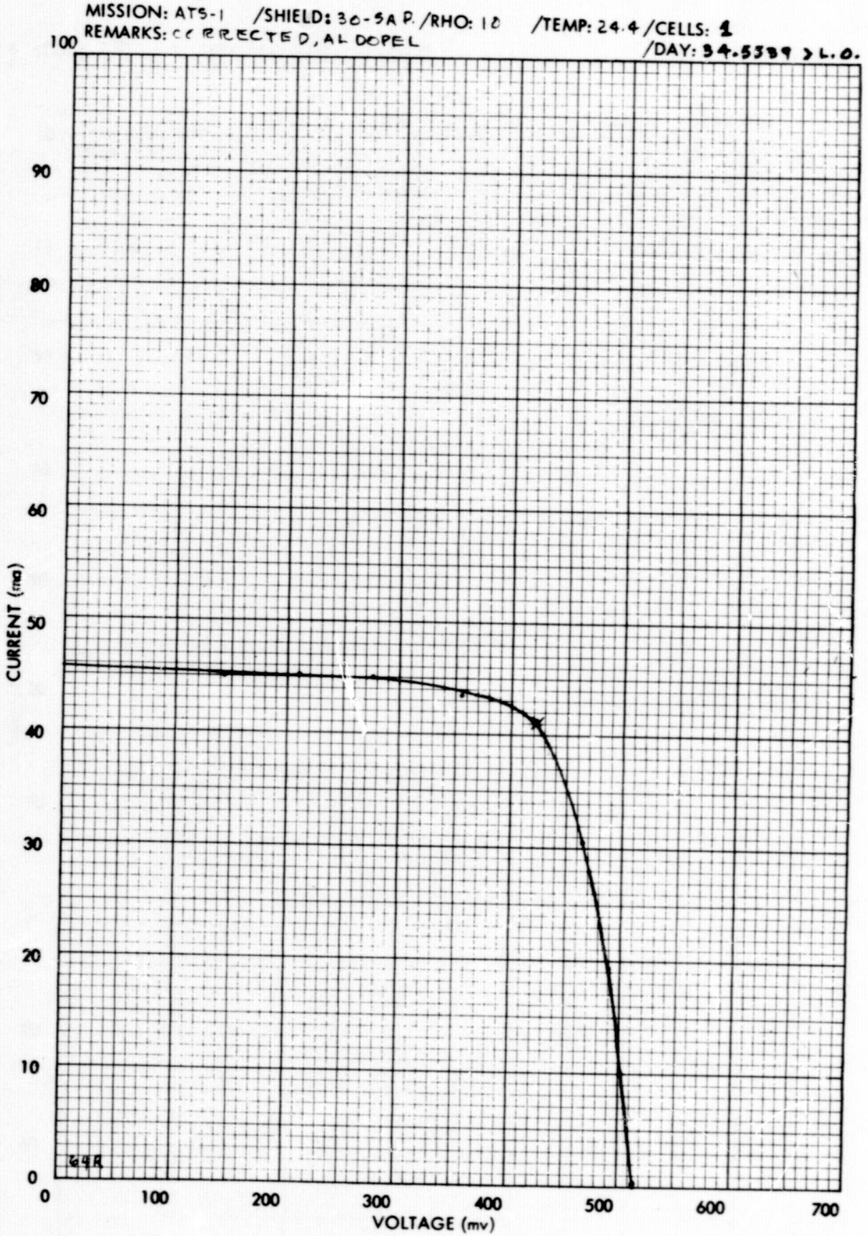
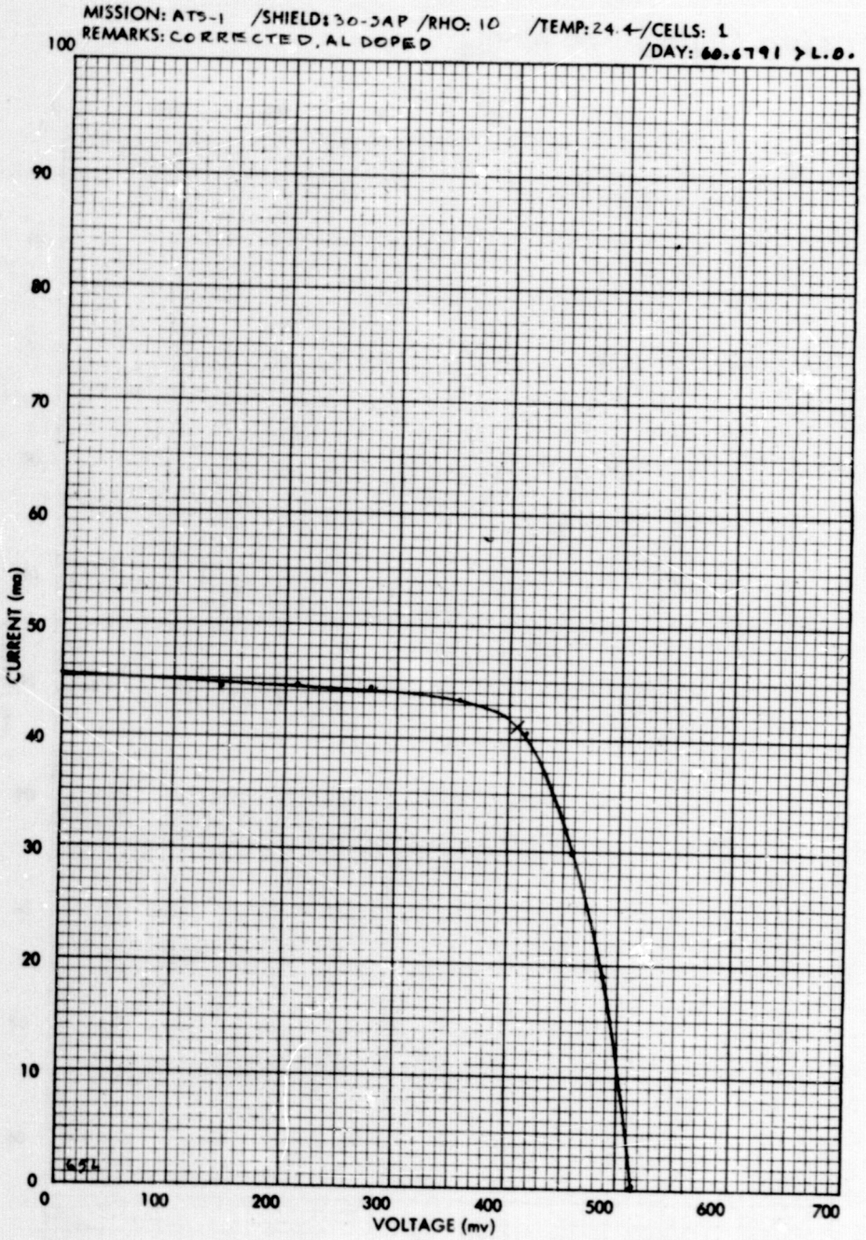


Figure 64. Cell 1, Days 20.3 and 34.5. Corrected Data



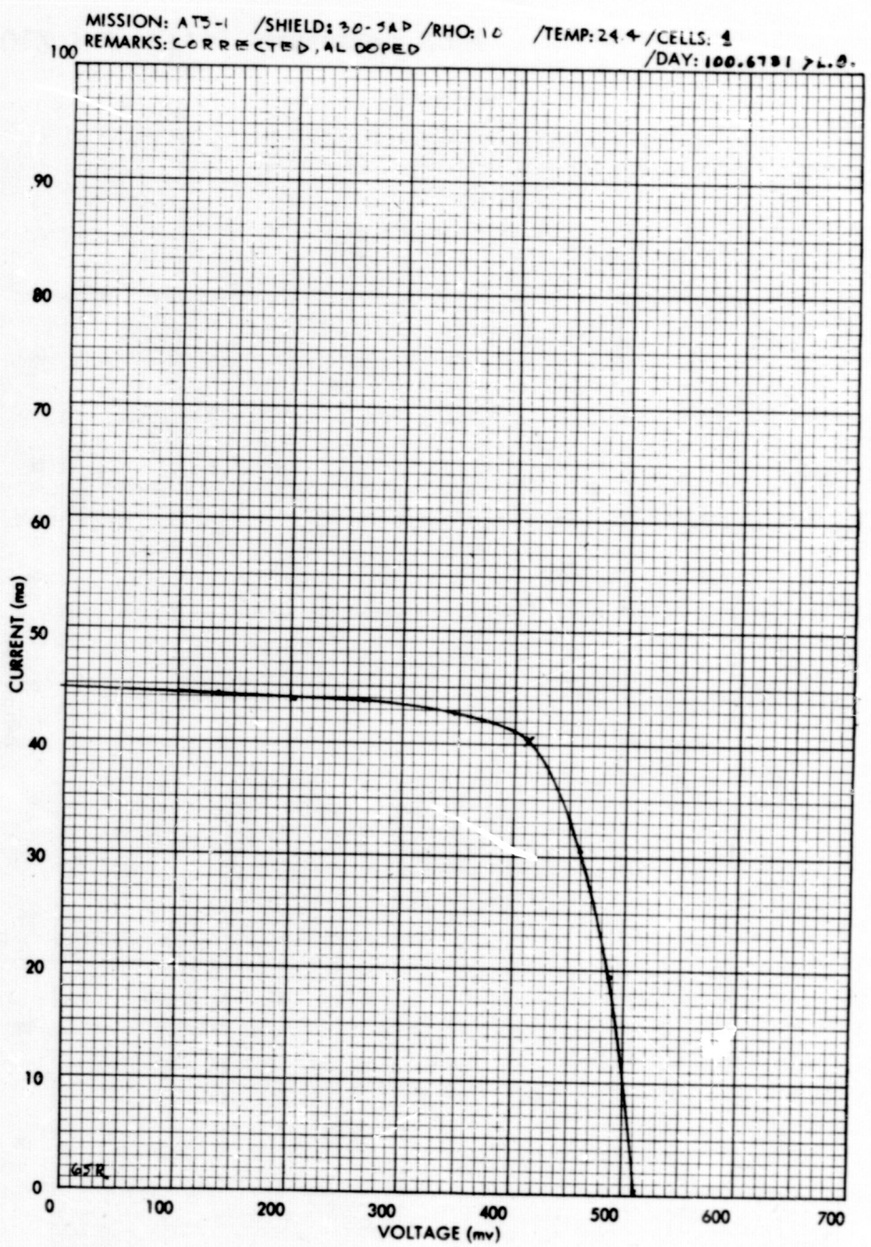
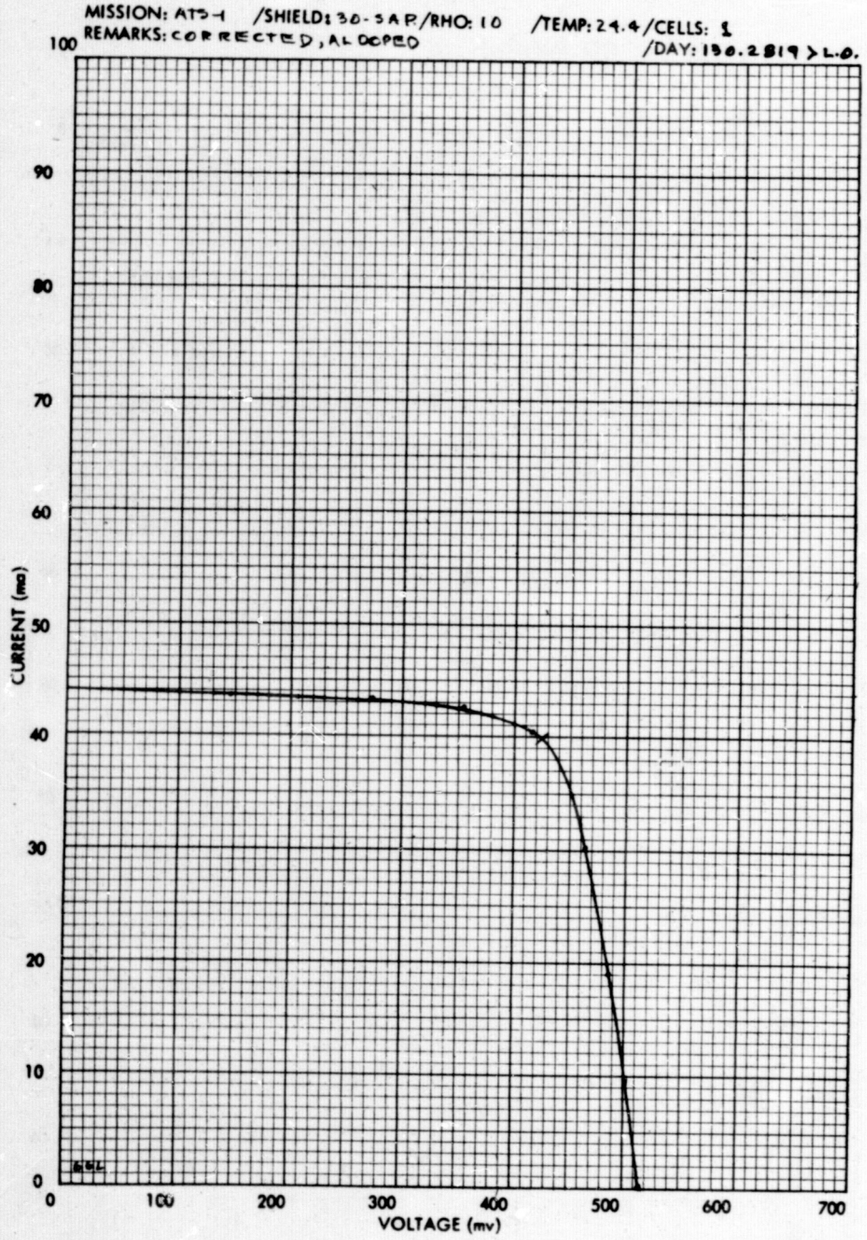
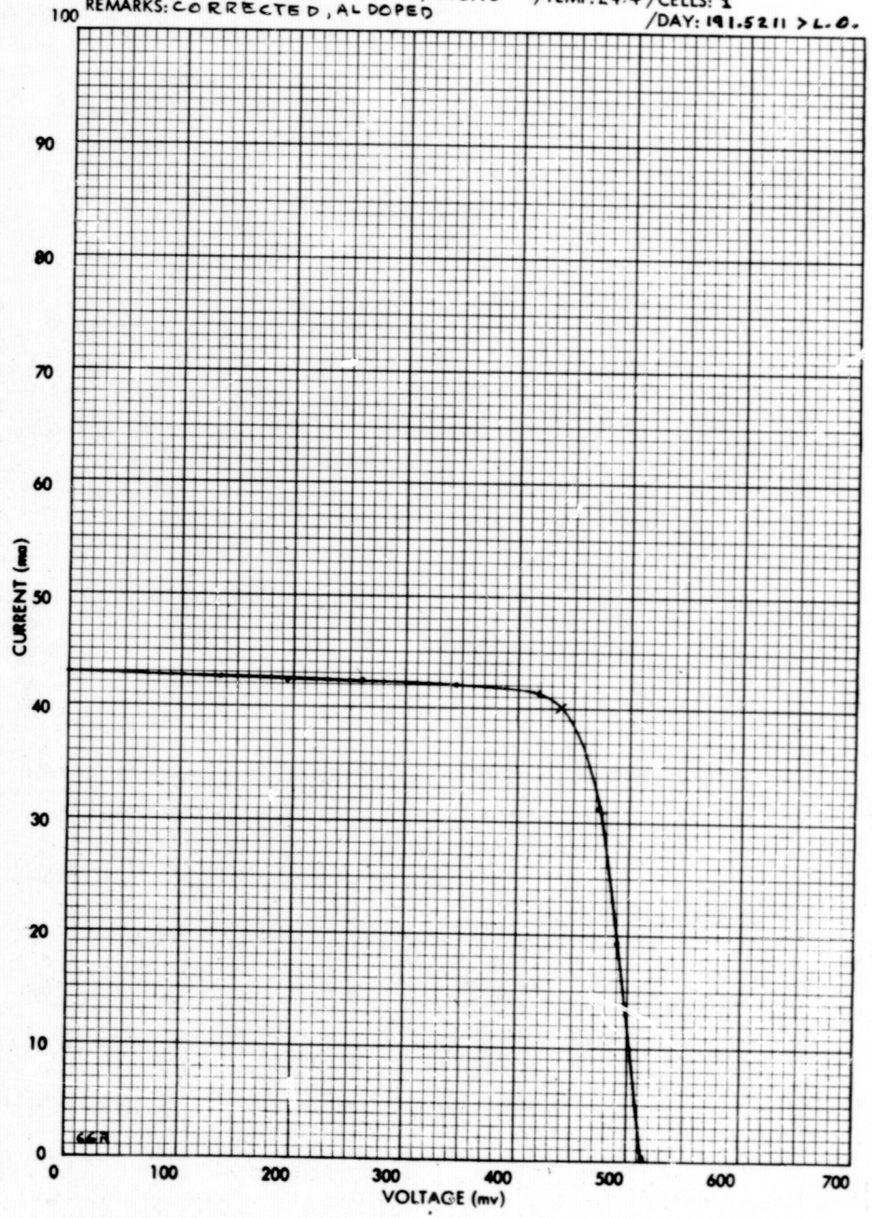


Figure 65. Cell 1, Days 60.6 and 100.6. Corrected Data





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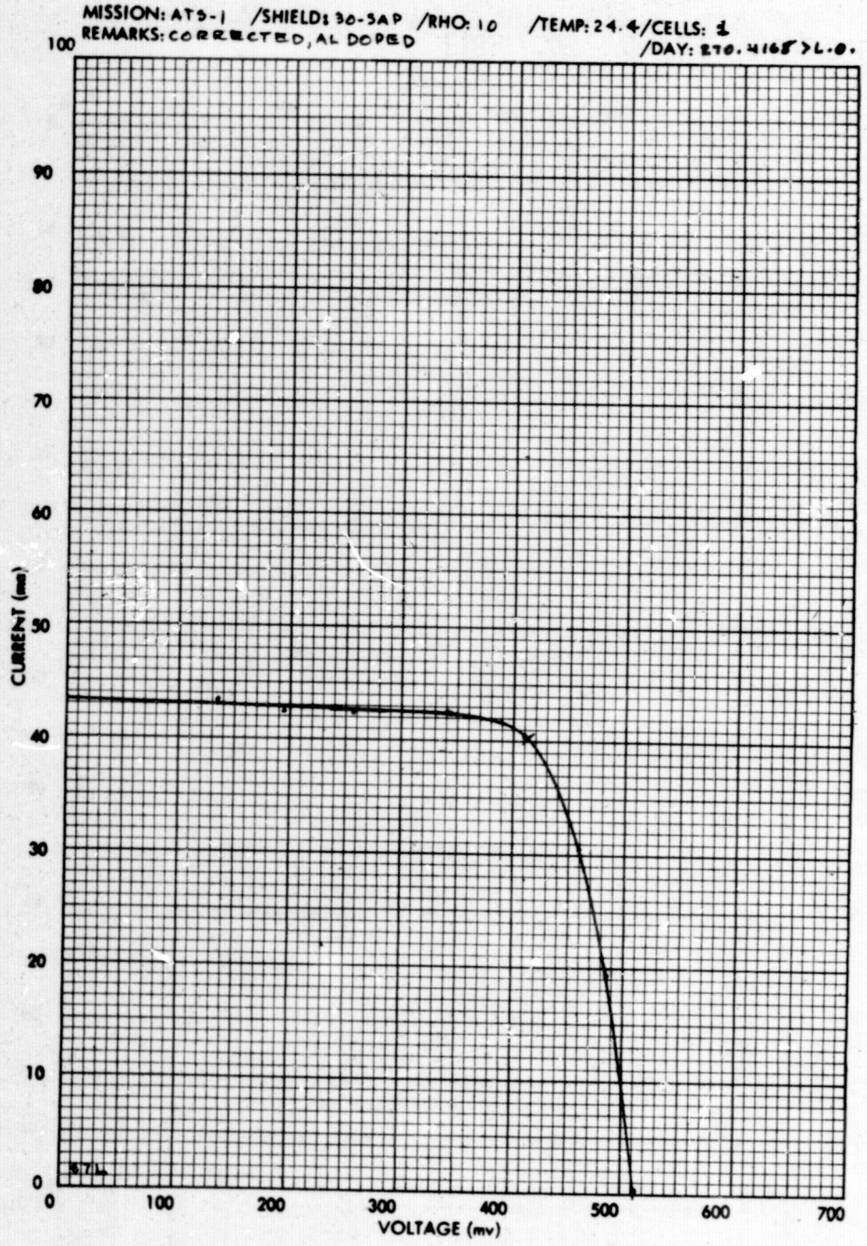


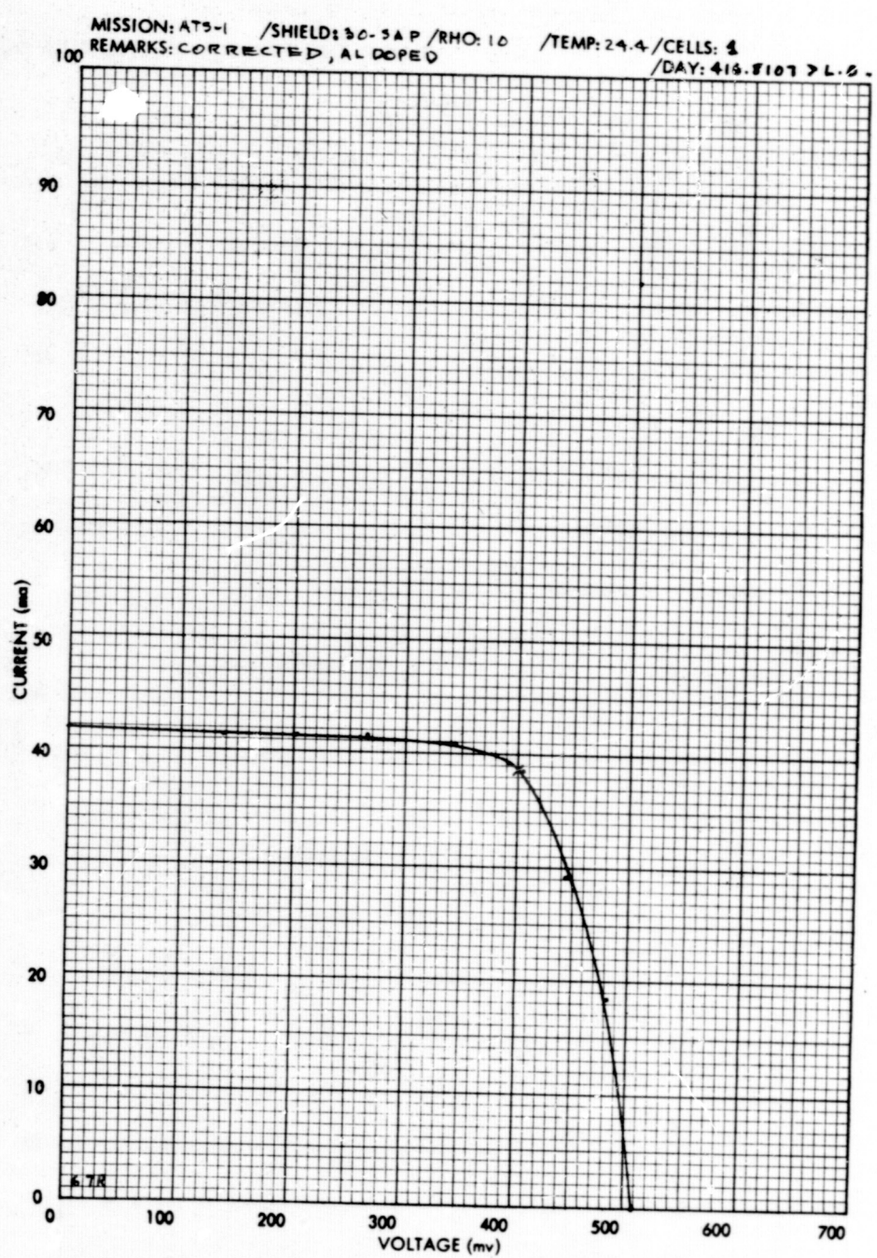
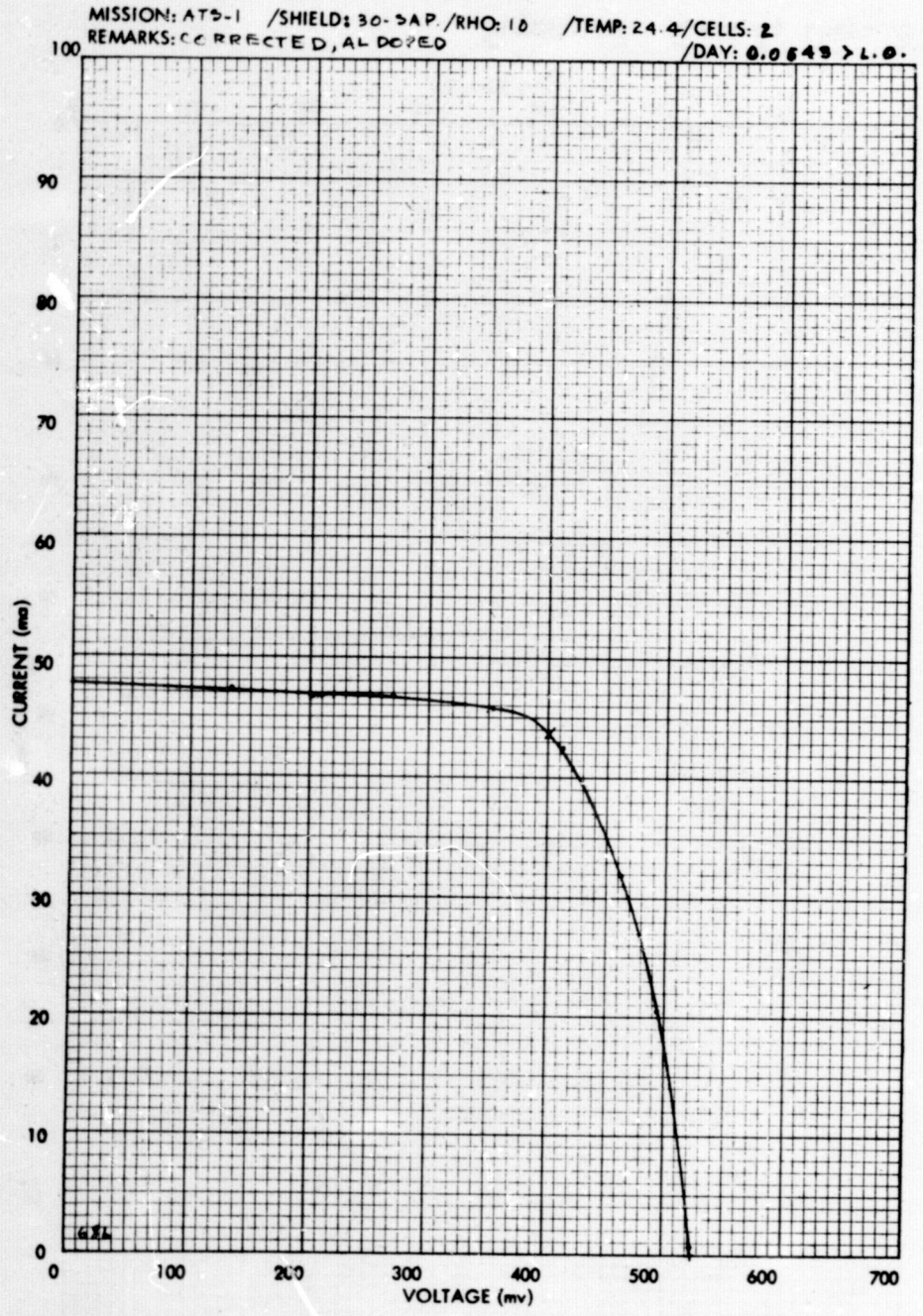
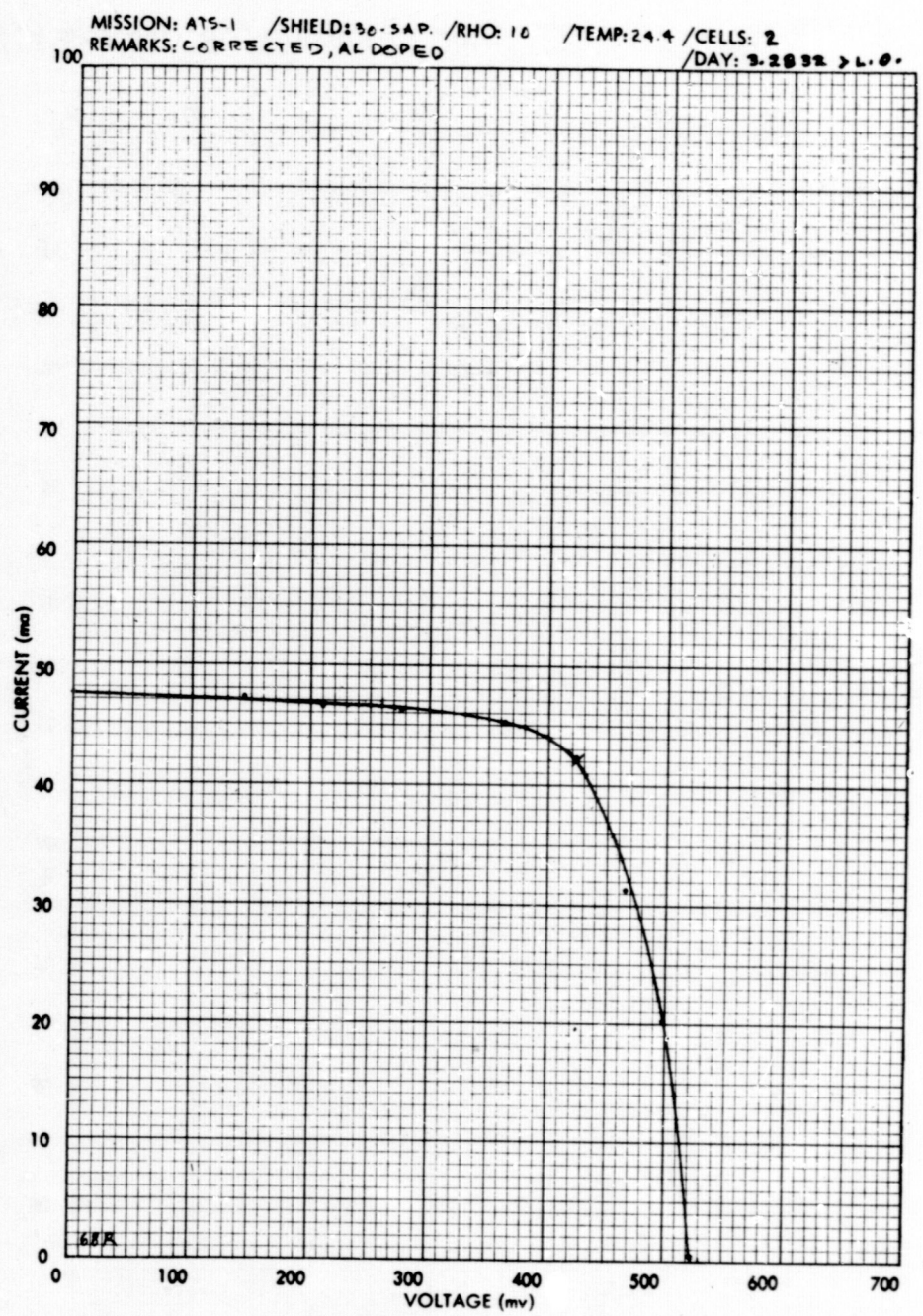


Figure 67. Cell 1, Days 270.4 and 416.8. Corrected Data





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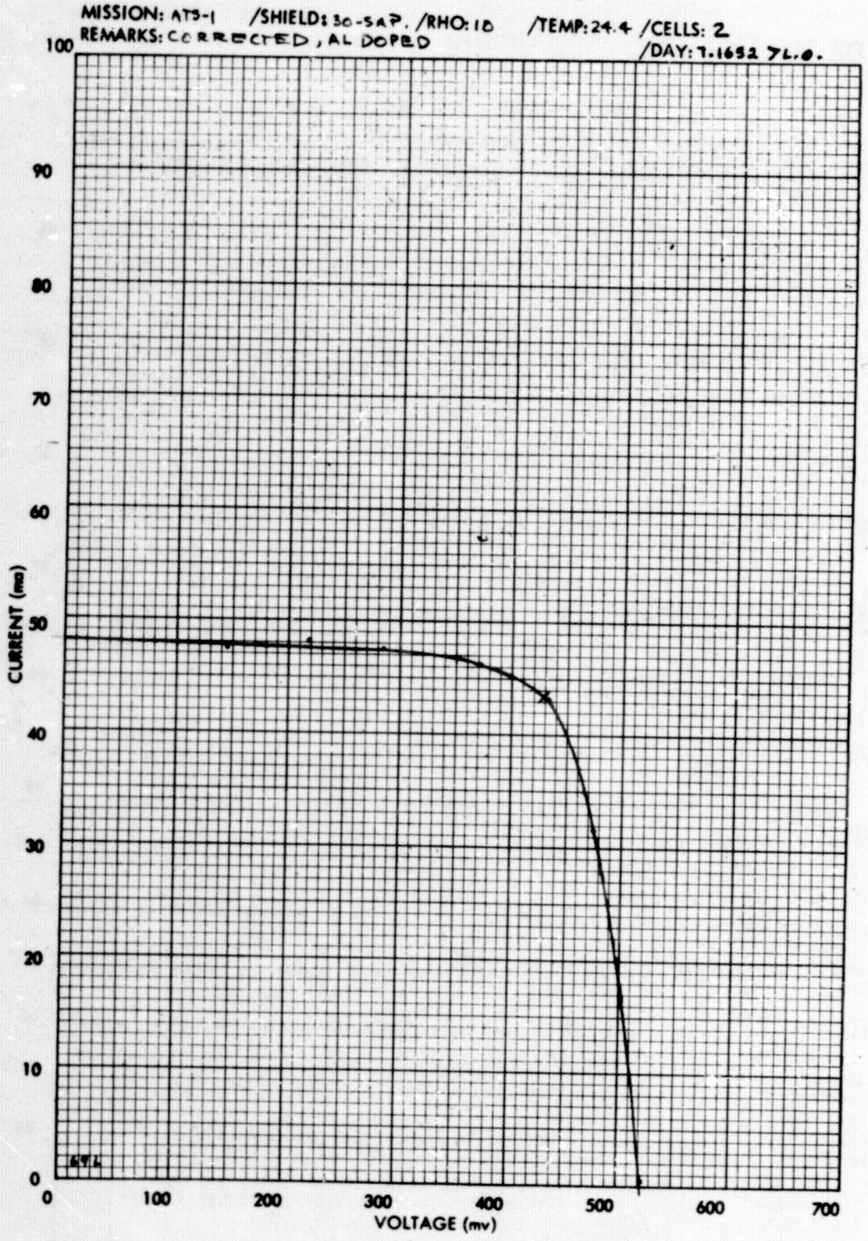


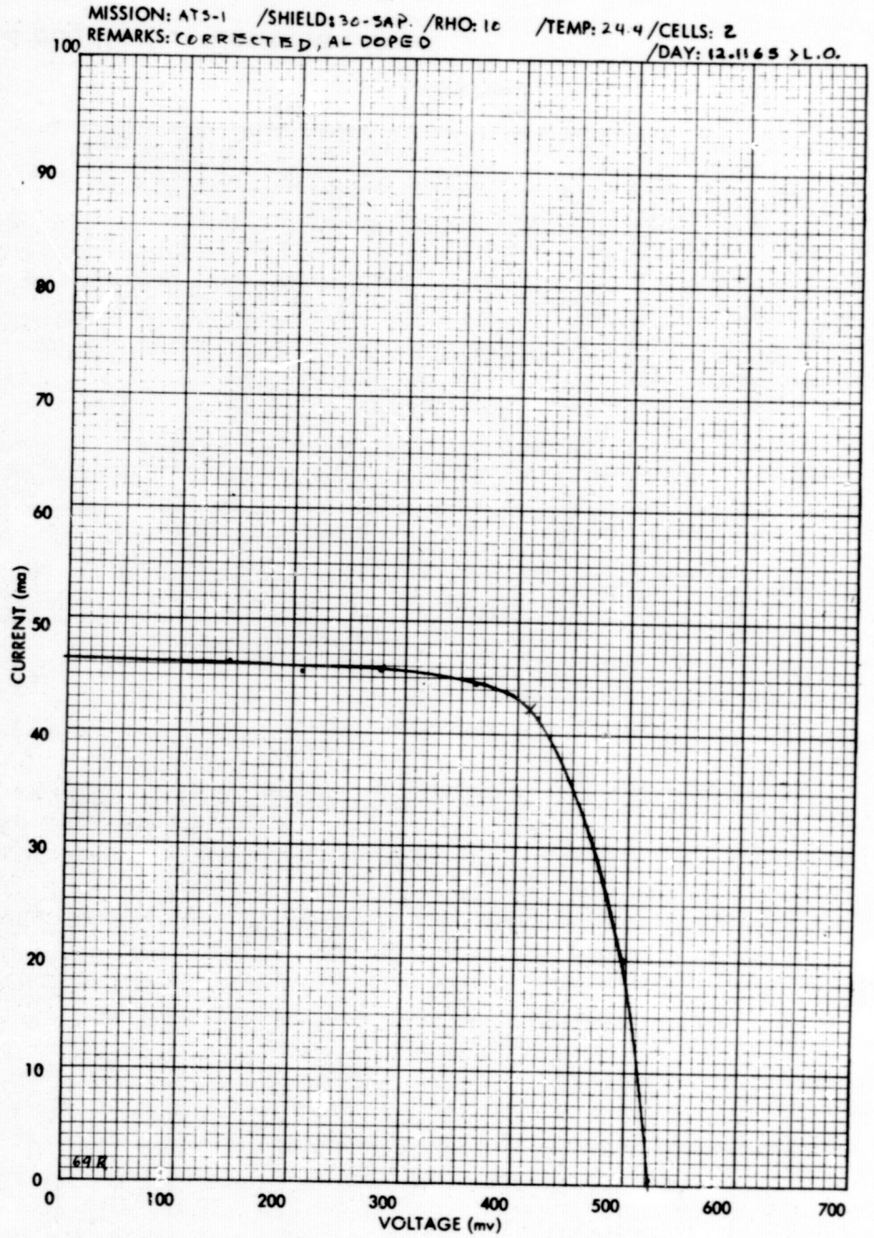
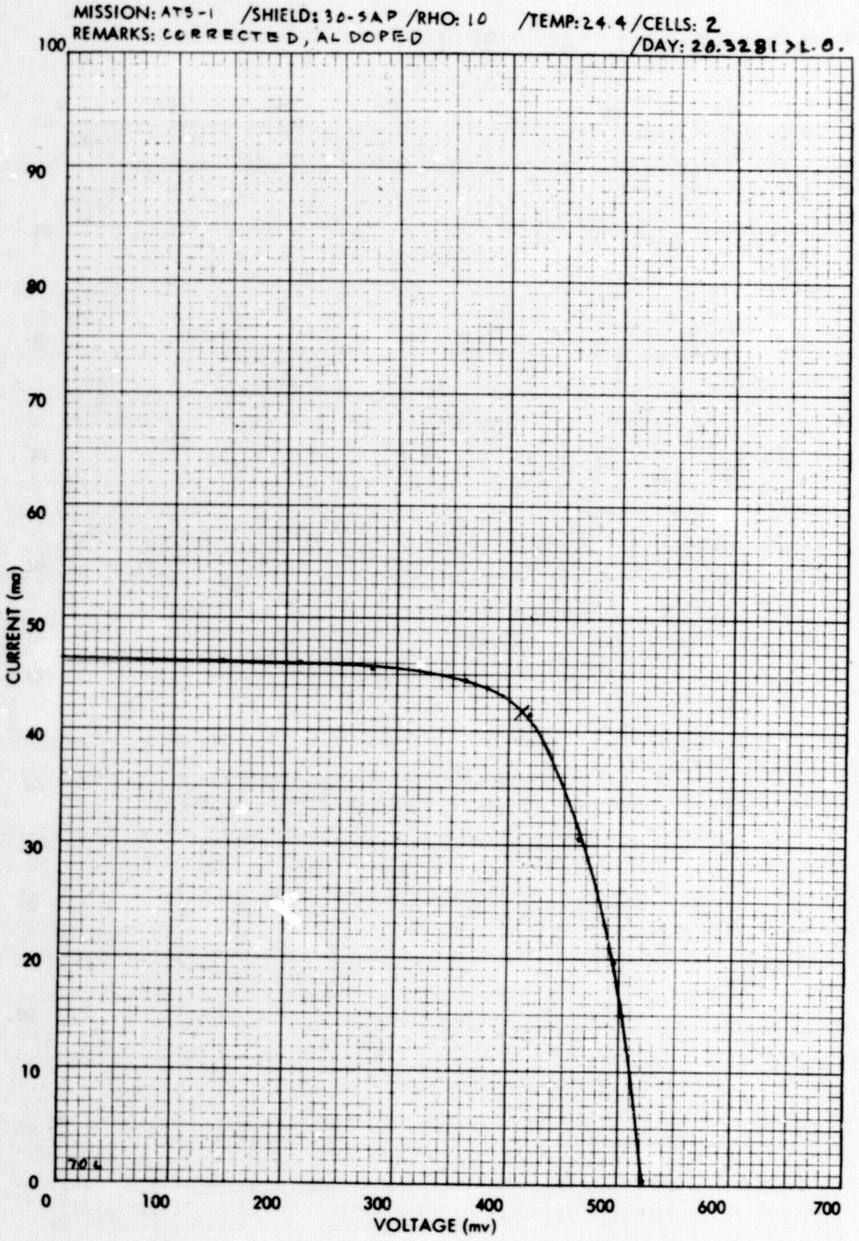


Figure 69. Cell 2, Days 7.1 and 12.1. Corrected Data



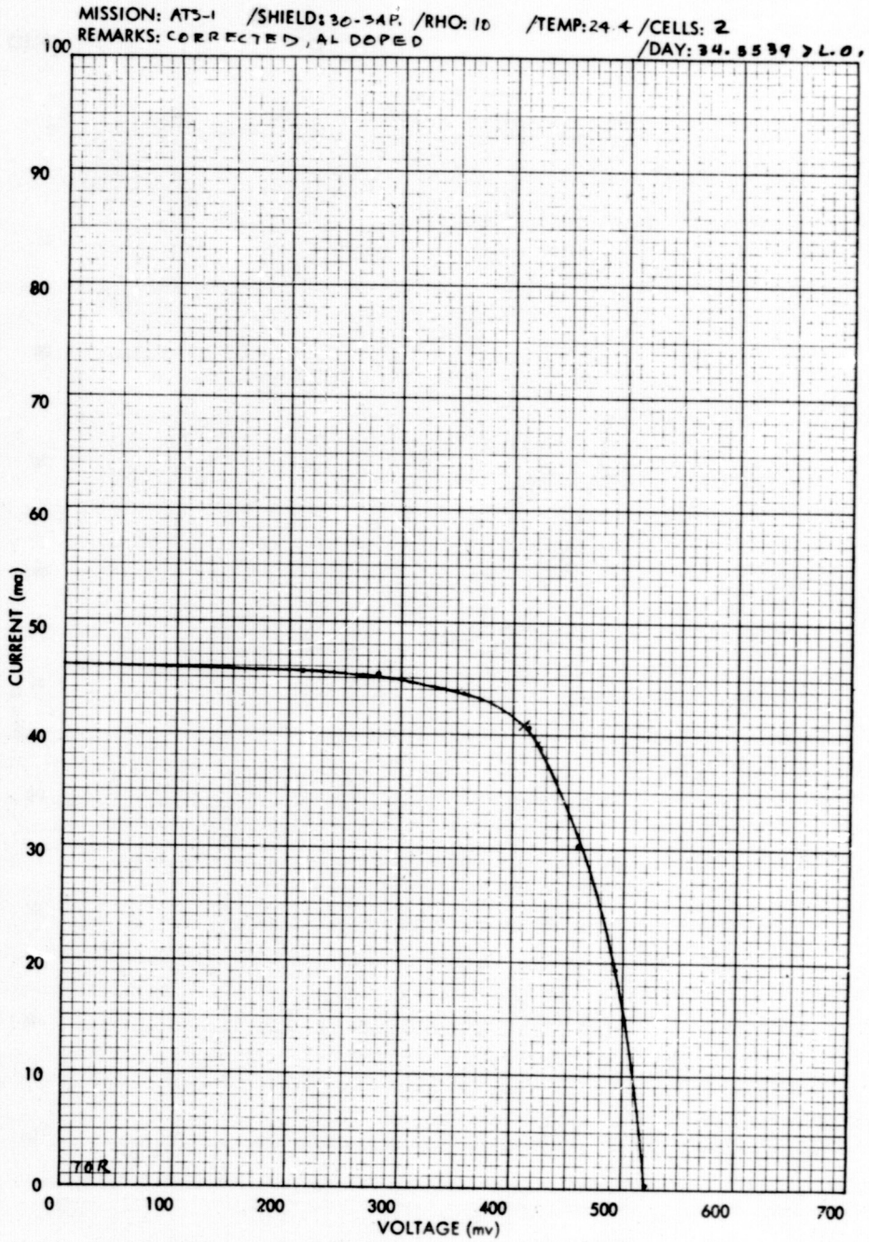
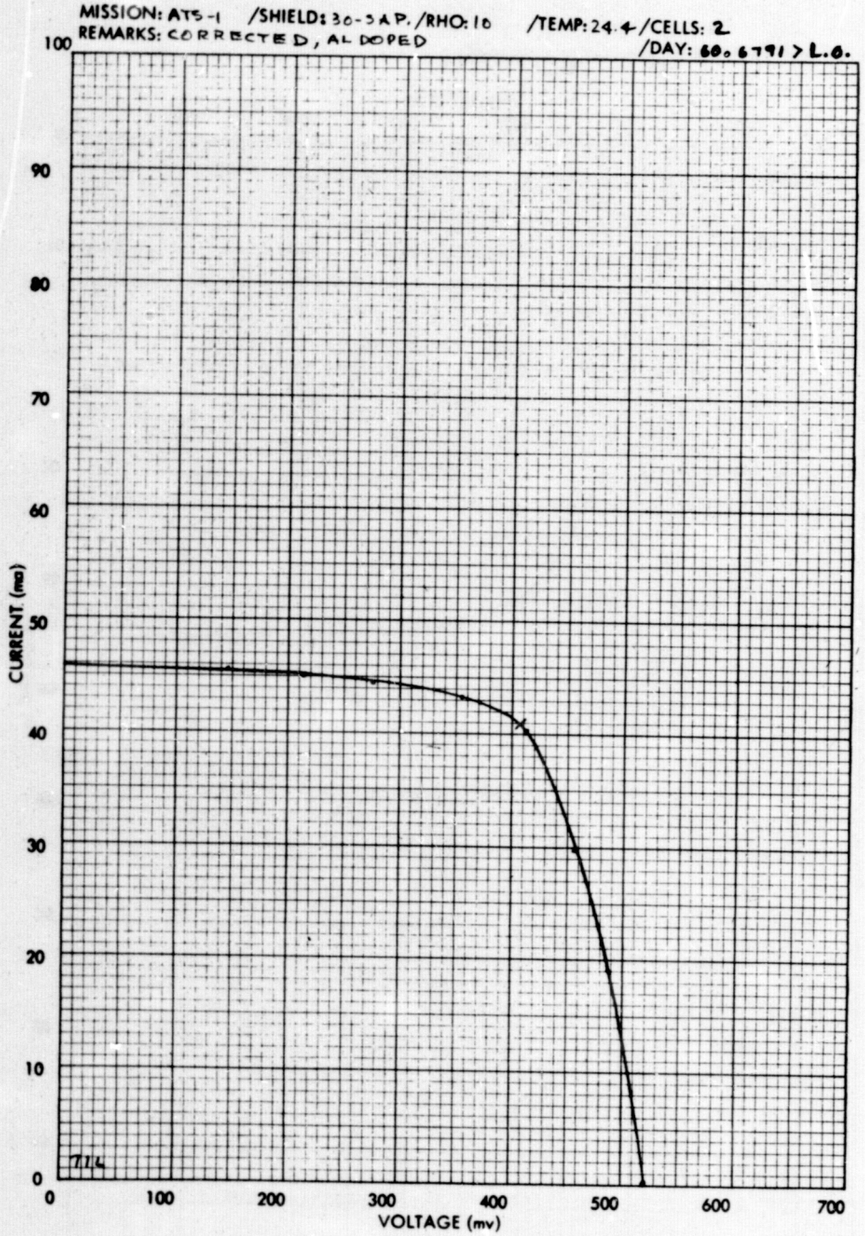


Figure 70. Cell 2, Days 20.3 and 34.5. Corrected Data



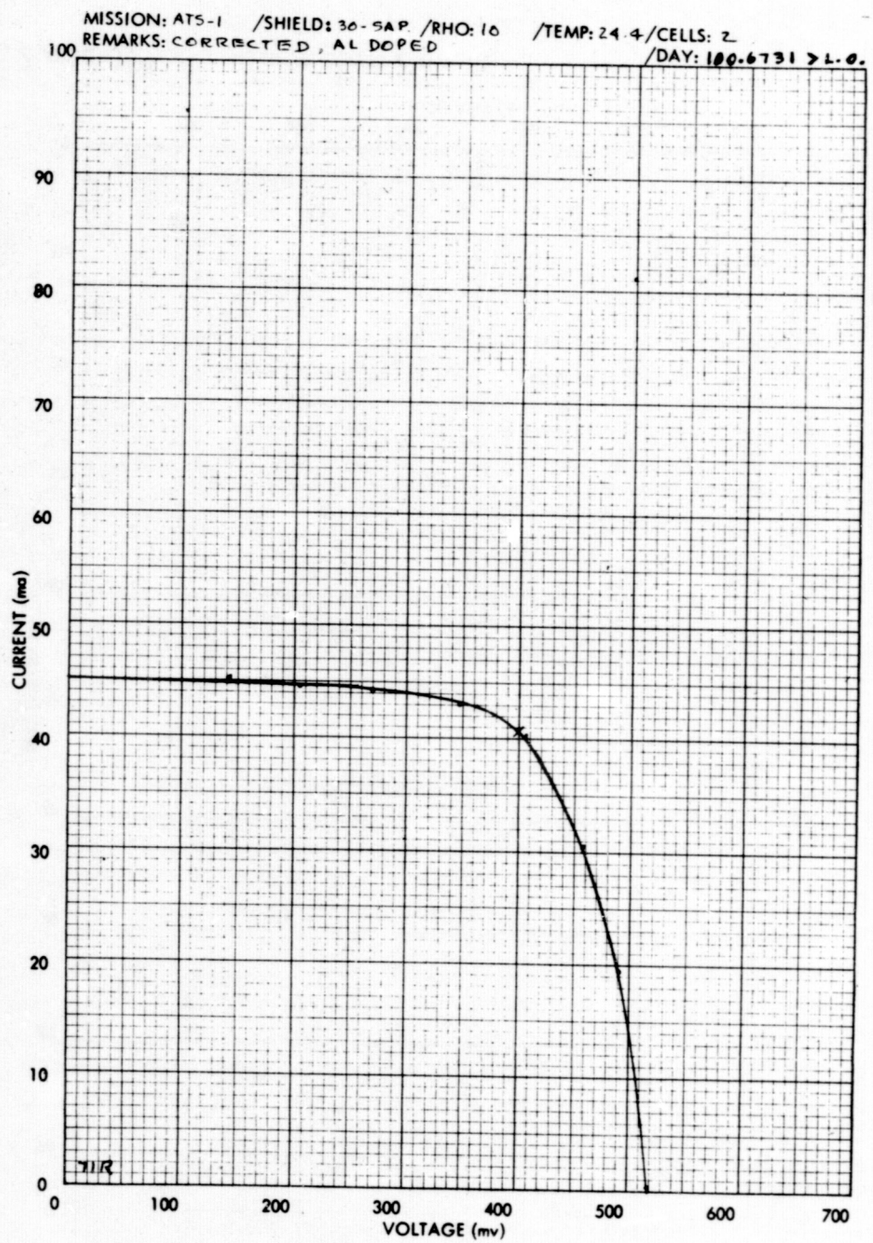


Figure 71. Cell 2, Days 60.6 and 100.6. Corrected Data

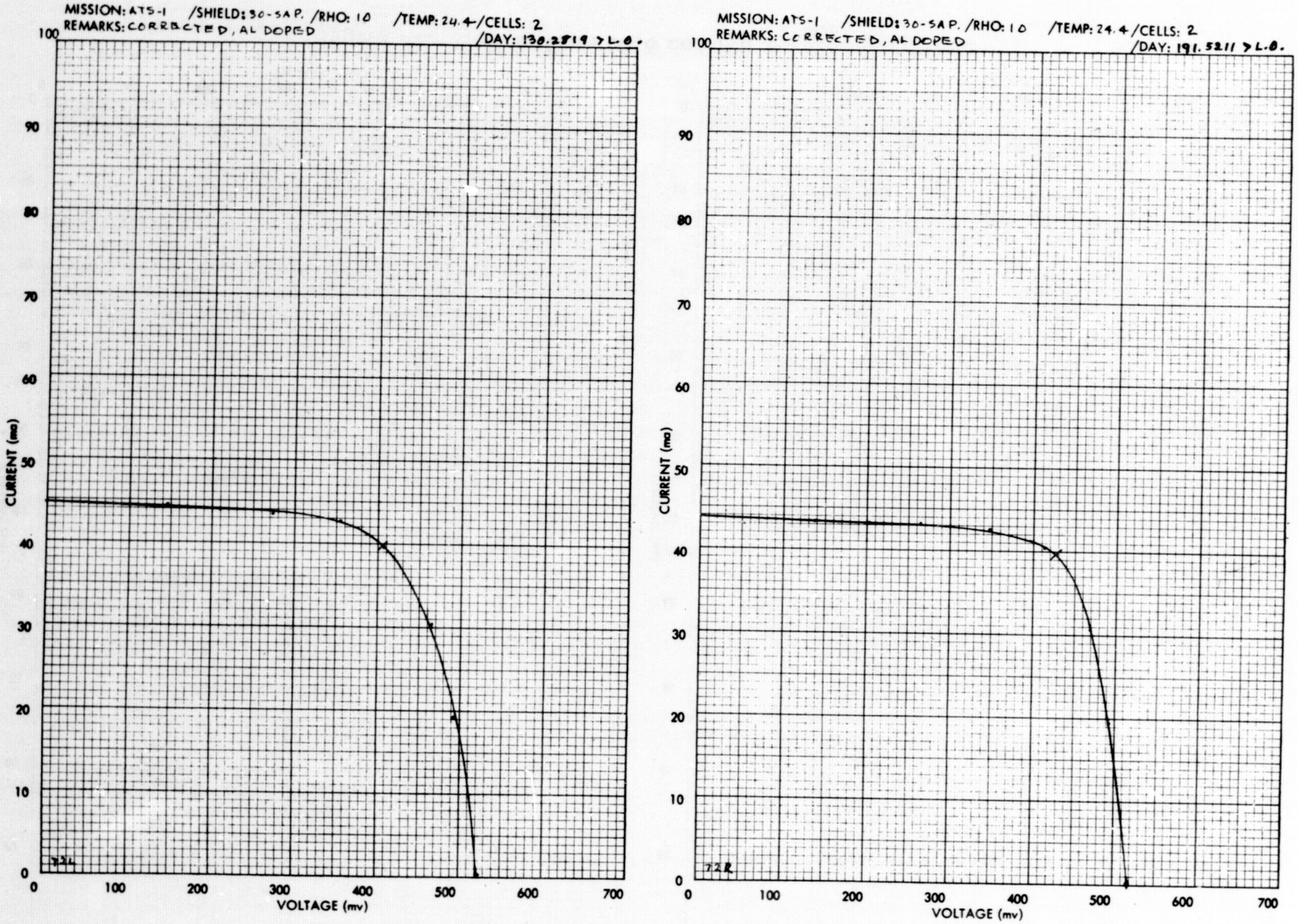
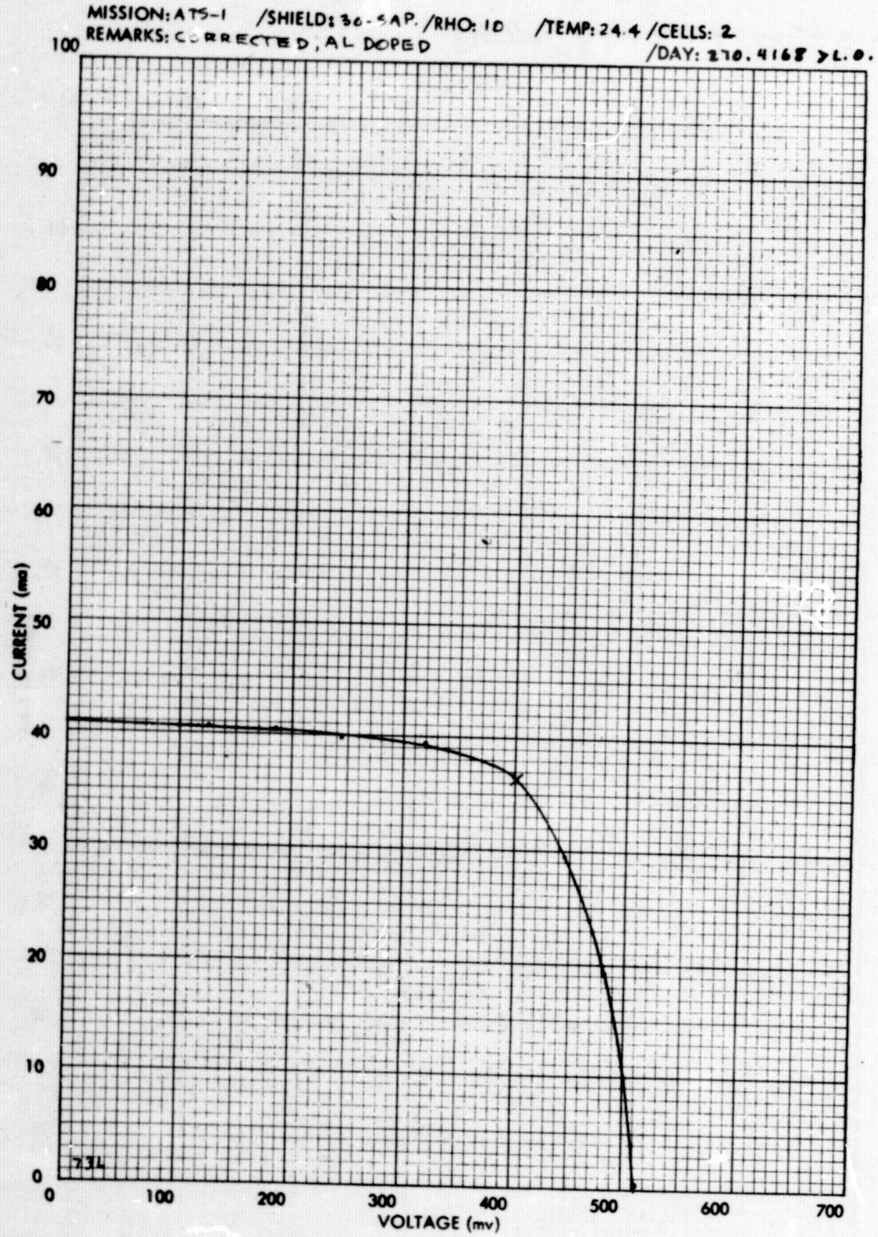


Figure 72. Cell 2, Days 130.2 and 191.5. Corrected Data



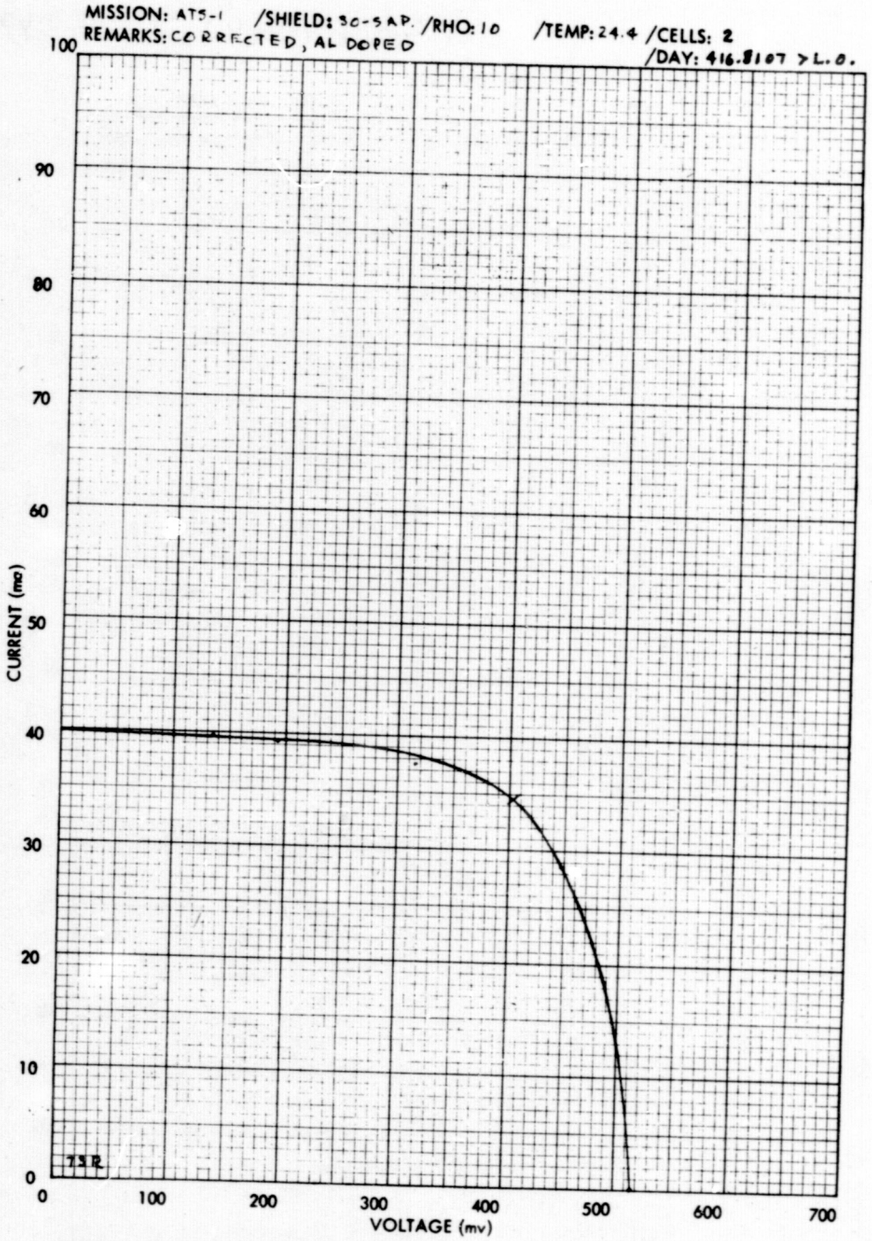
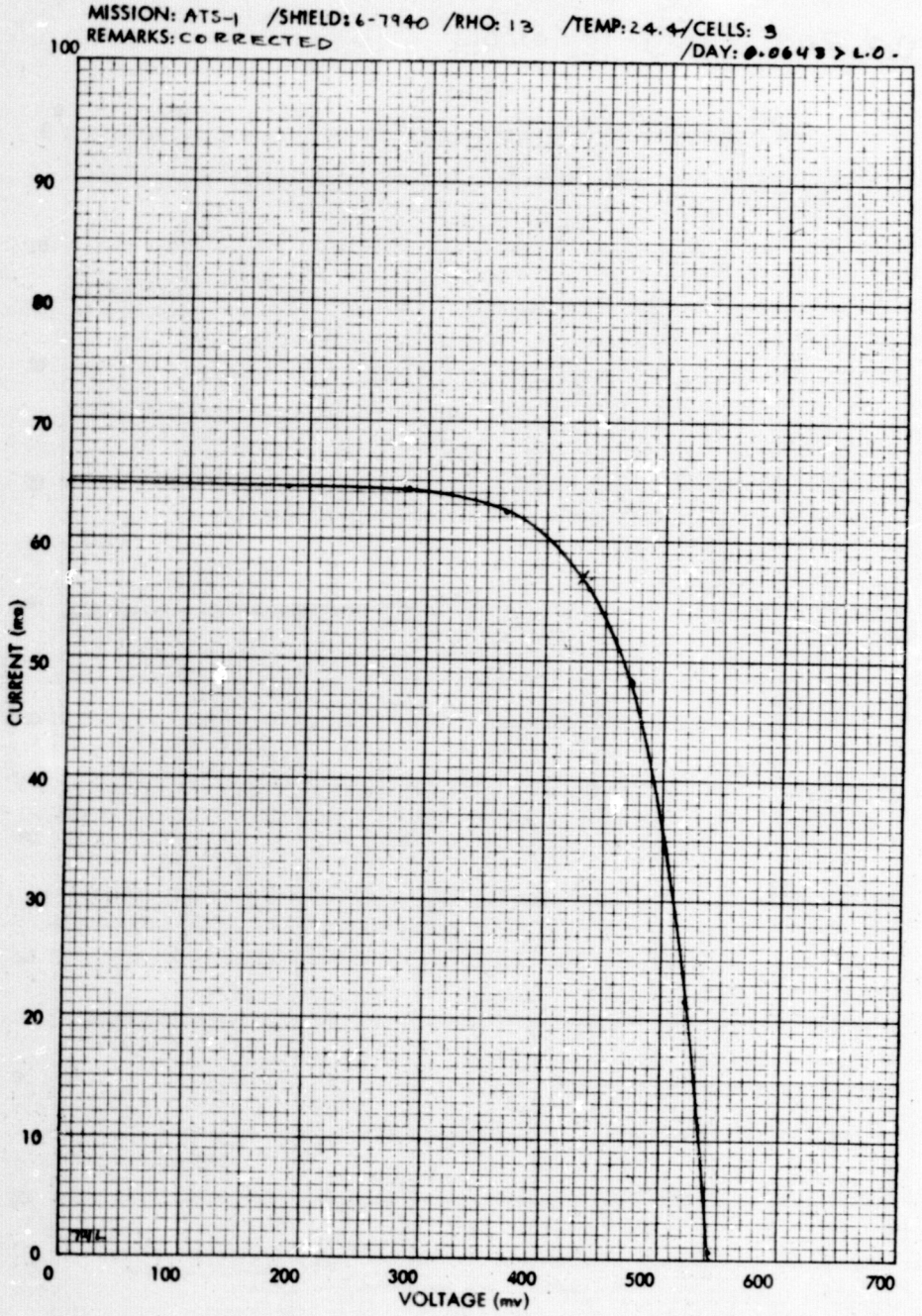
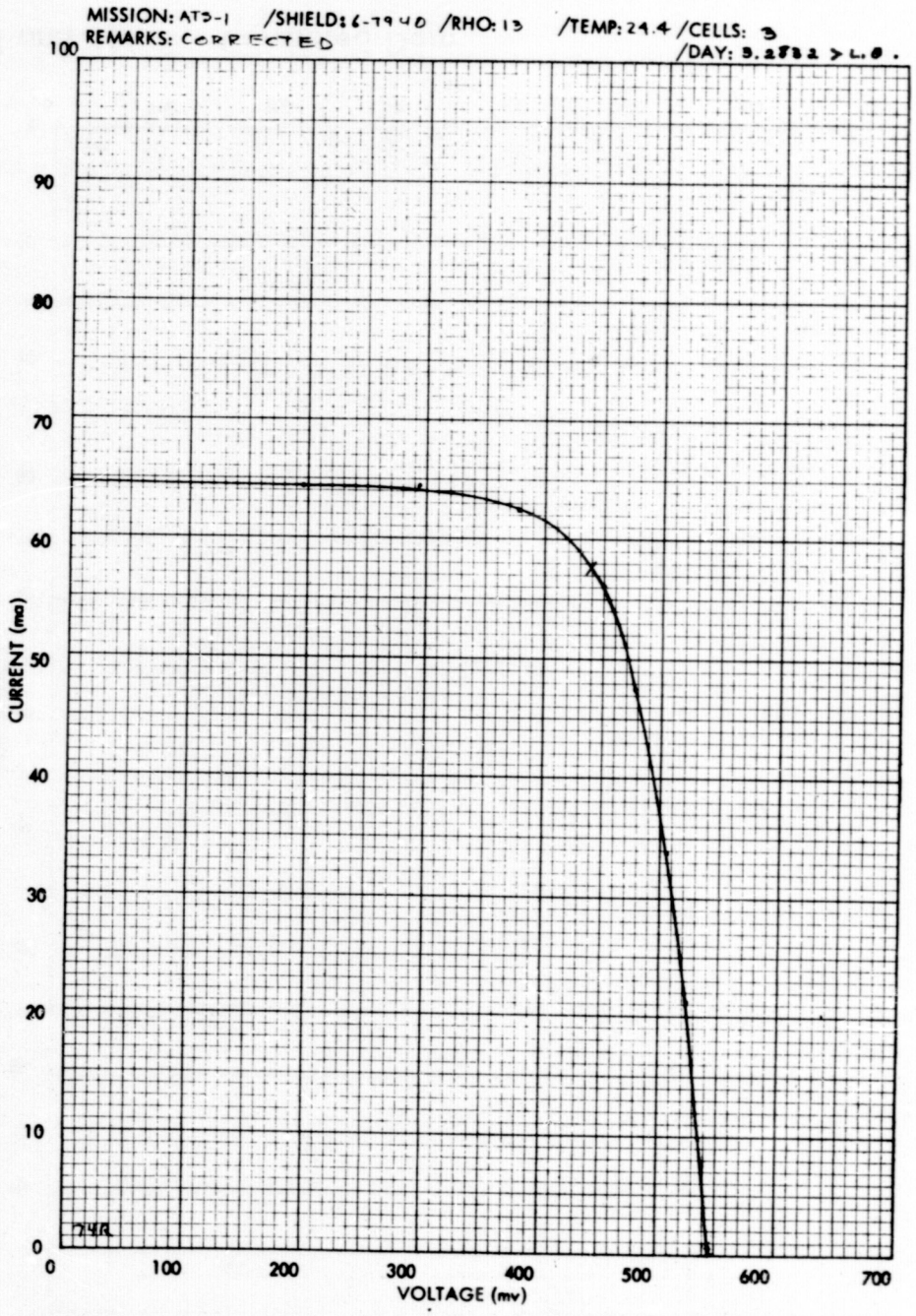


Figure 73. Cell 2, Days 270.4 and 416.8. Corrected Data





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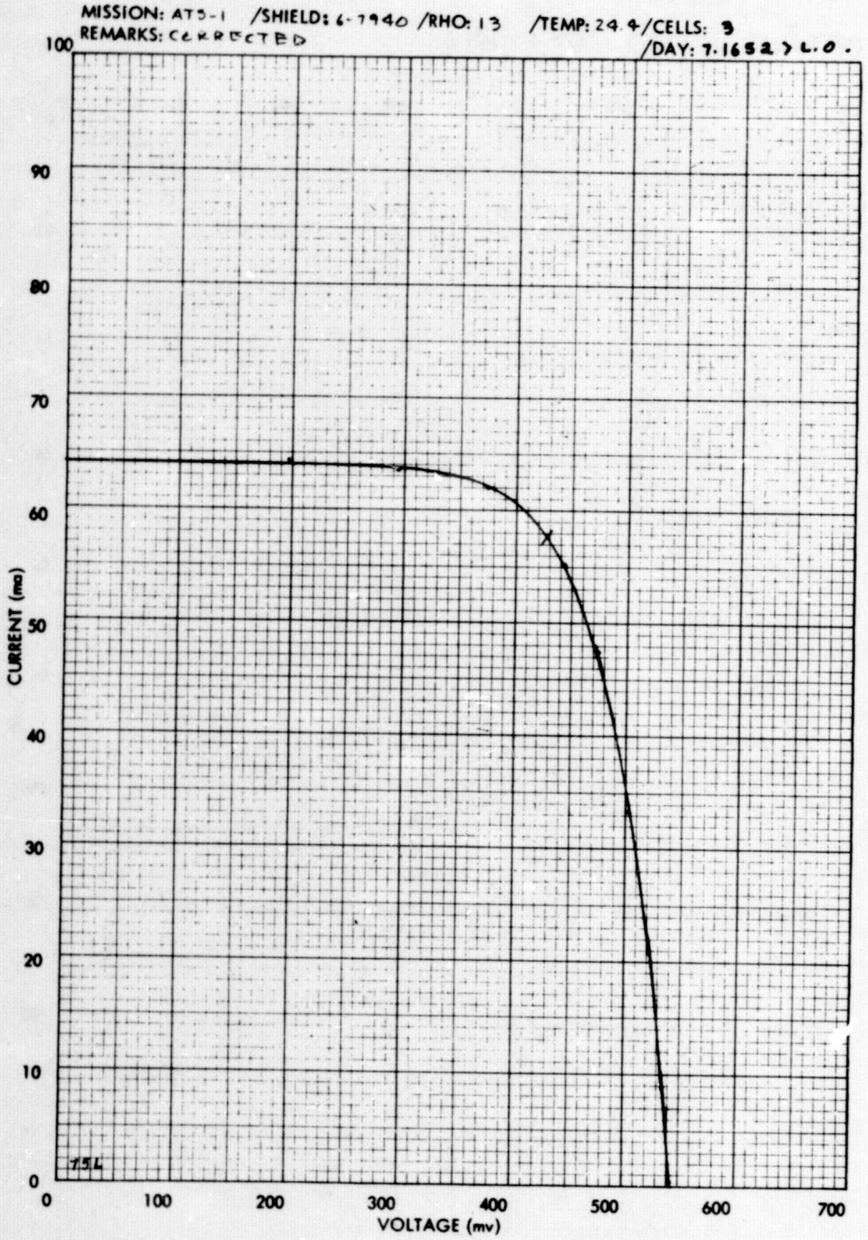

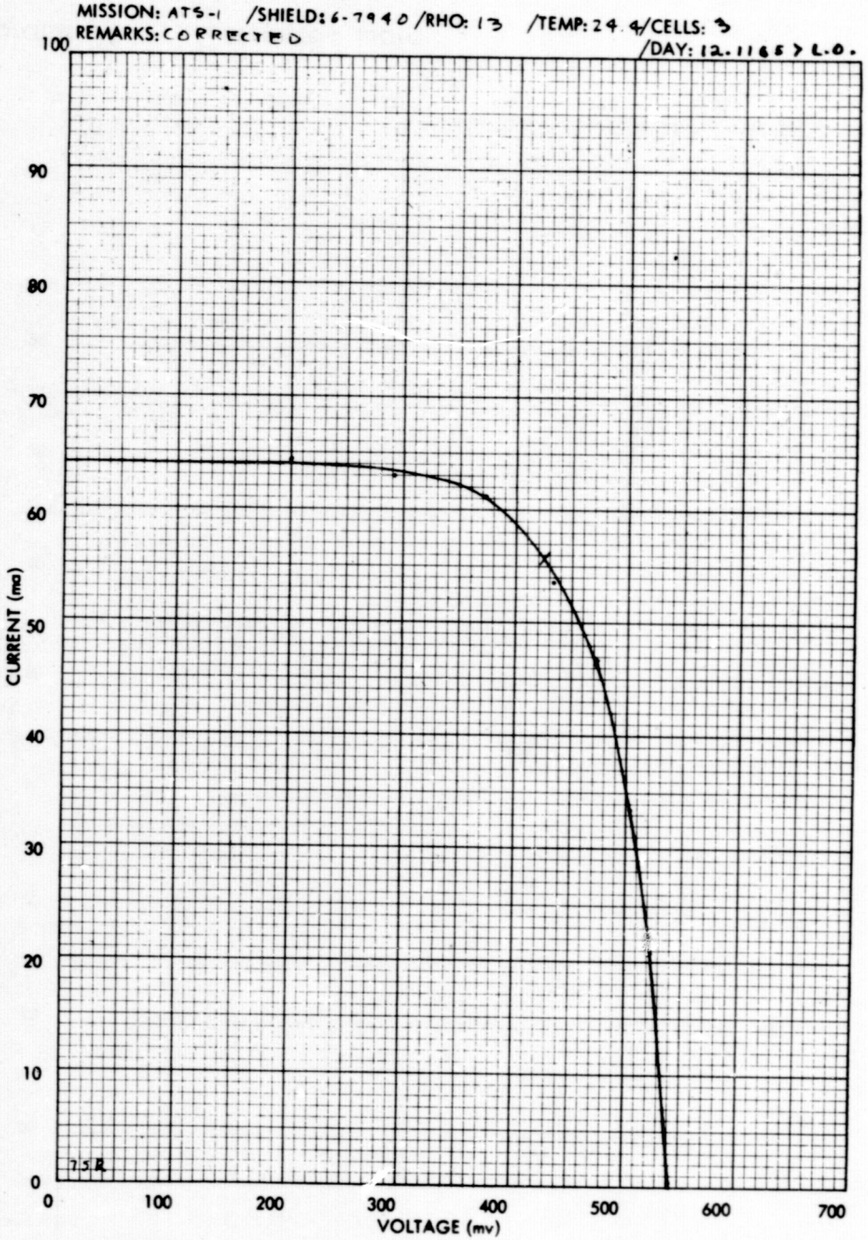

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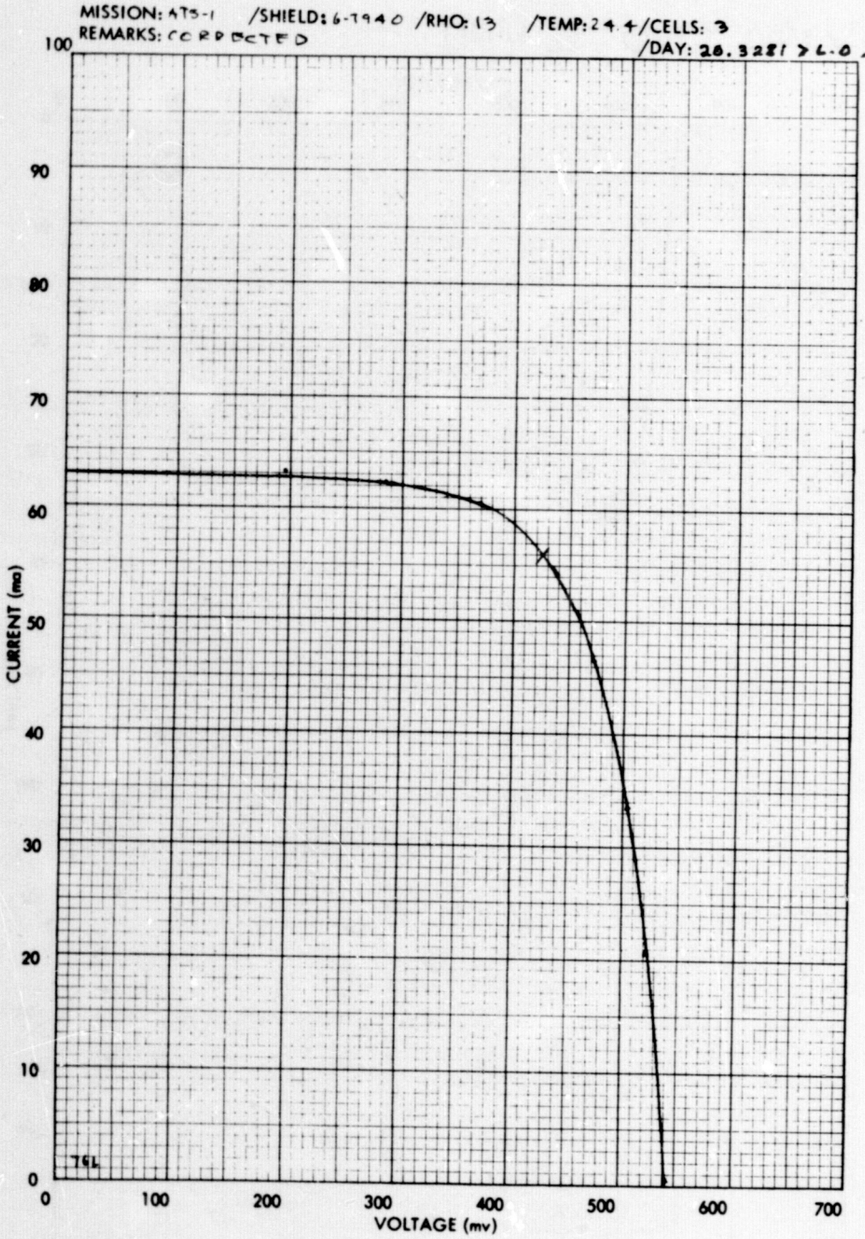

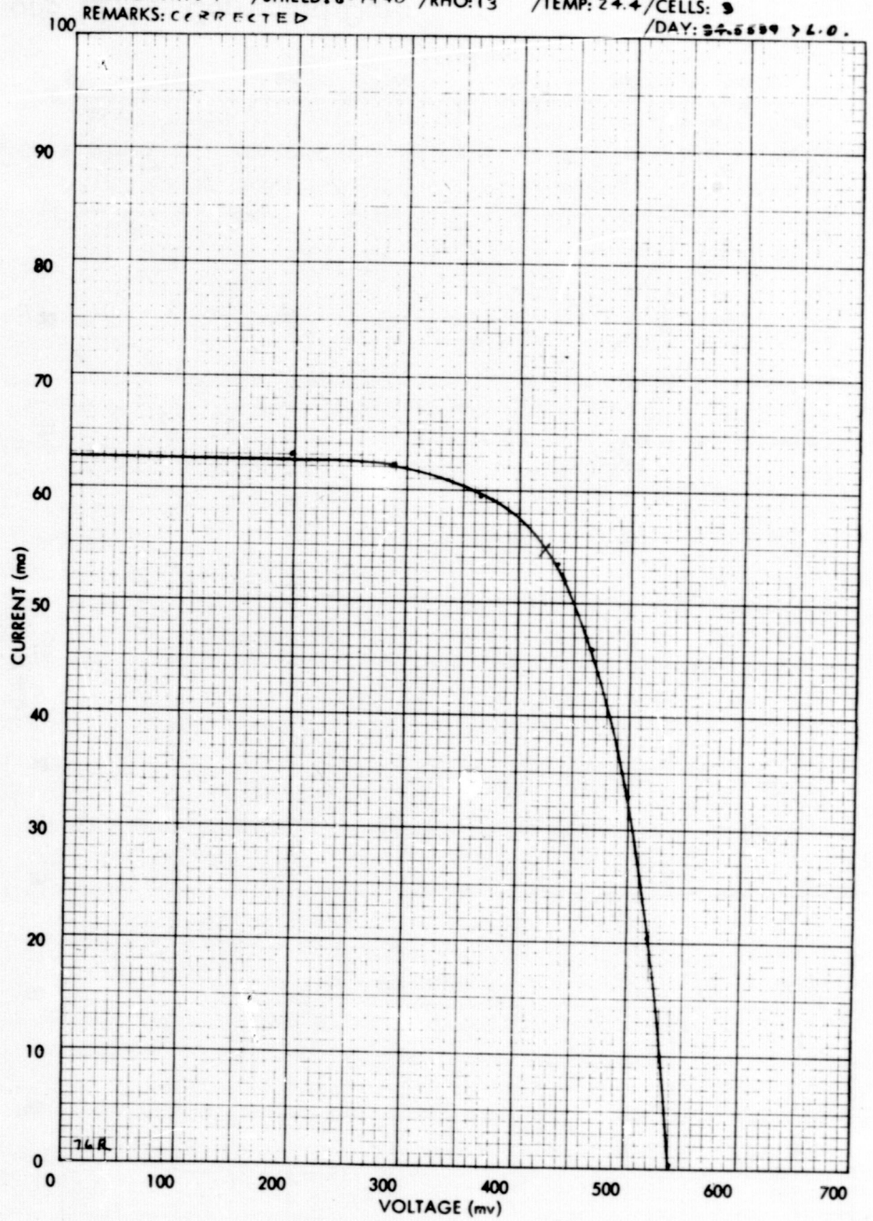

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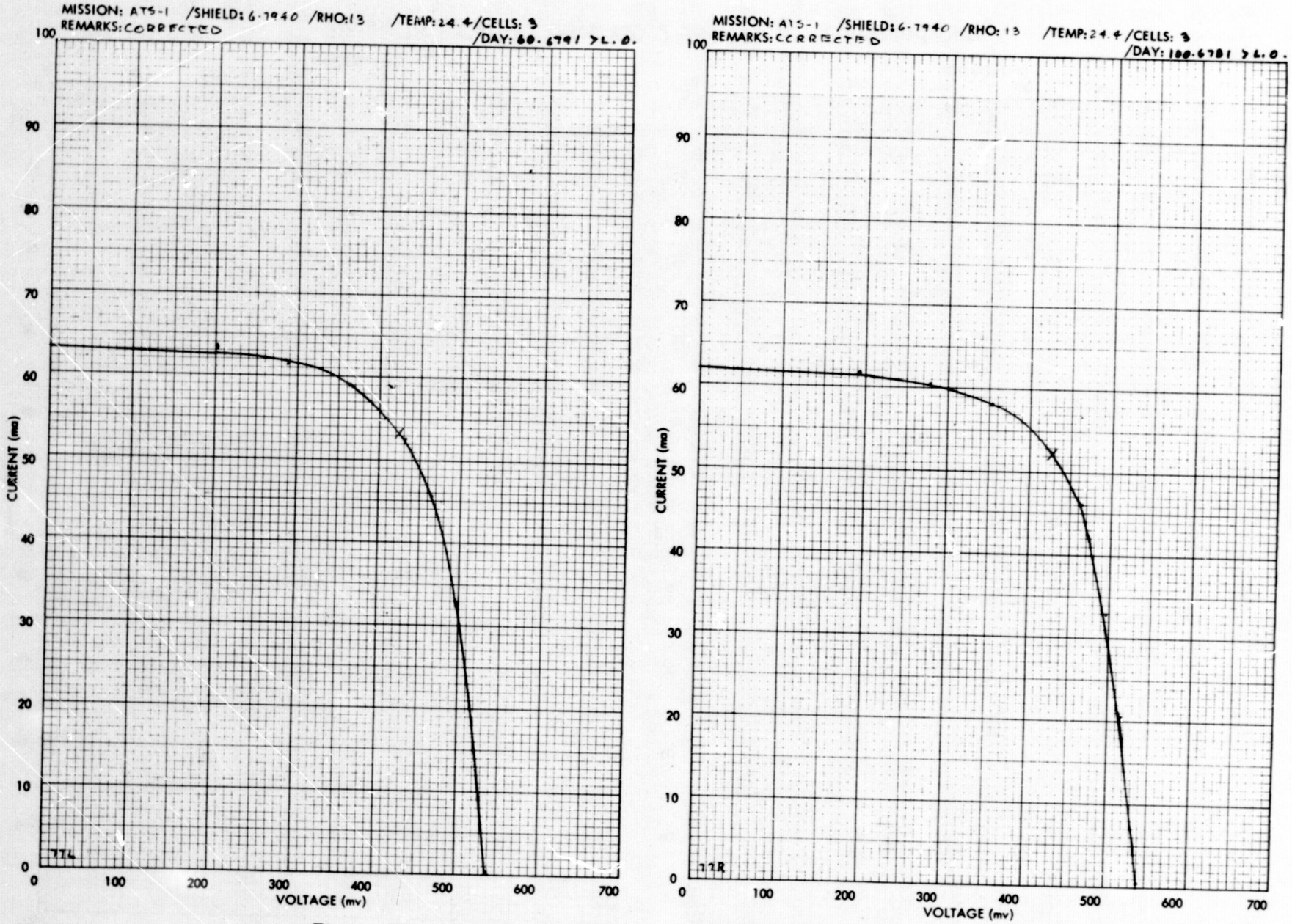
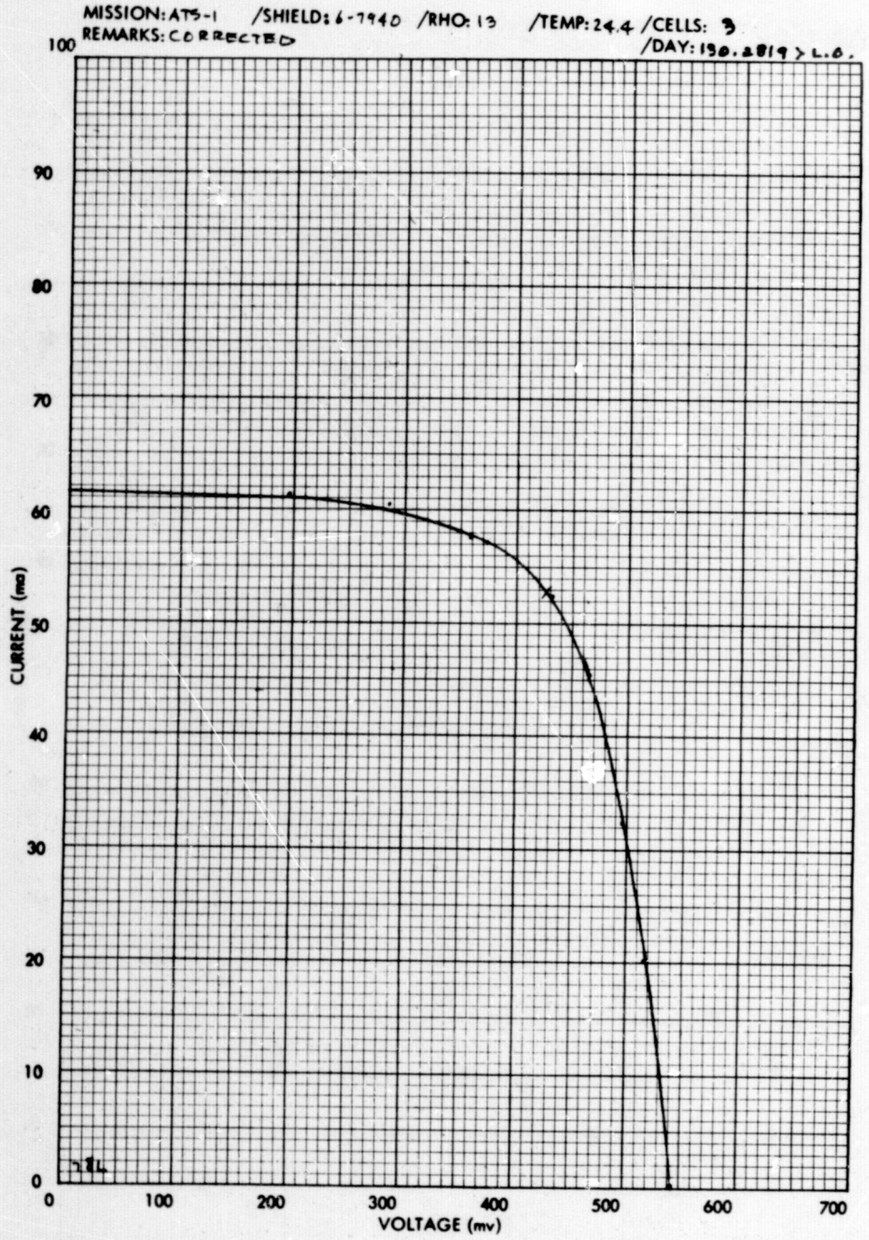


Figure 77. Cell 3, Days 60.6 and 100.6. Corrected Data



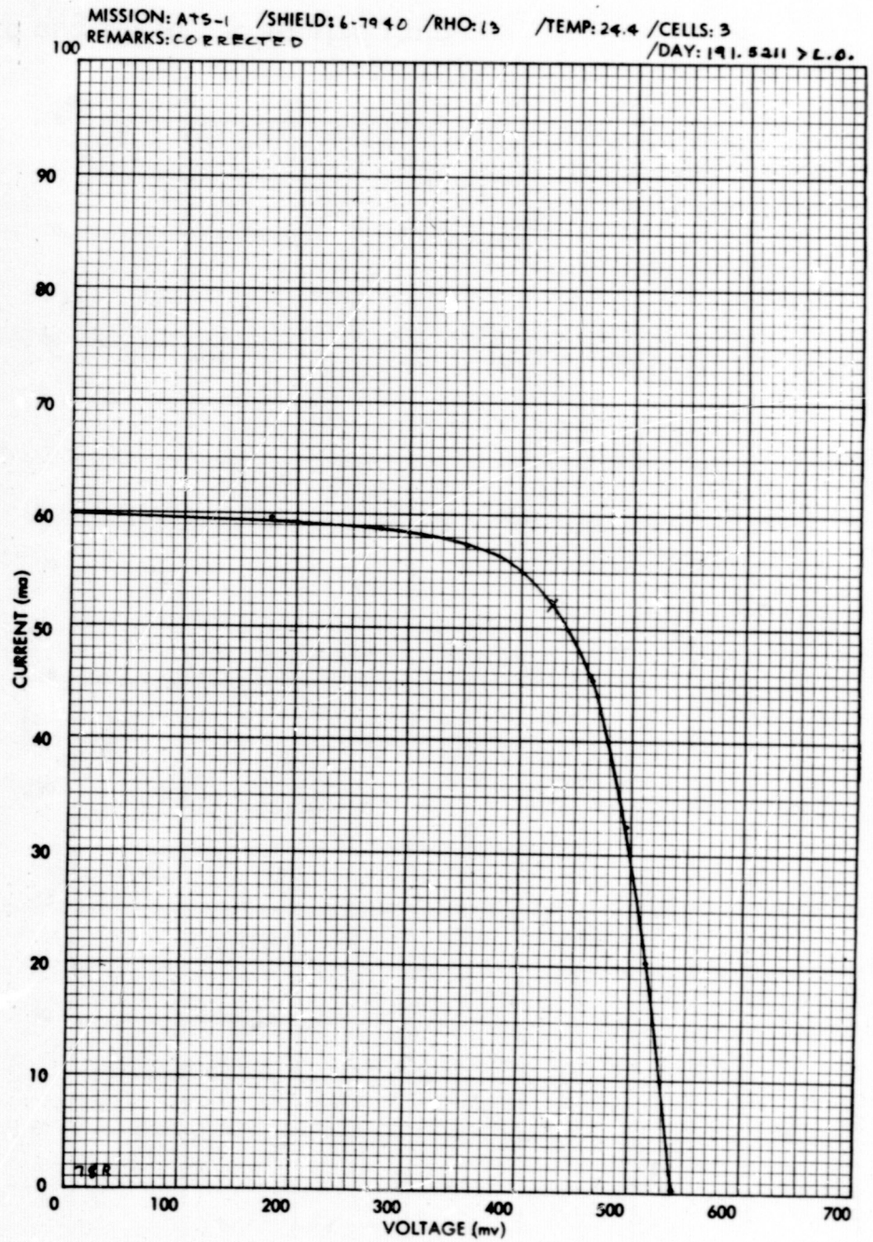
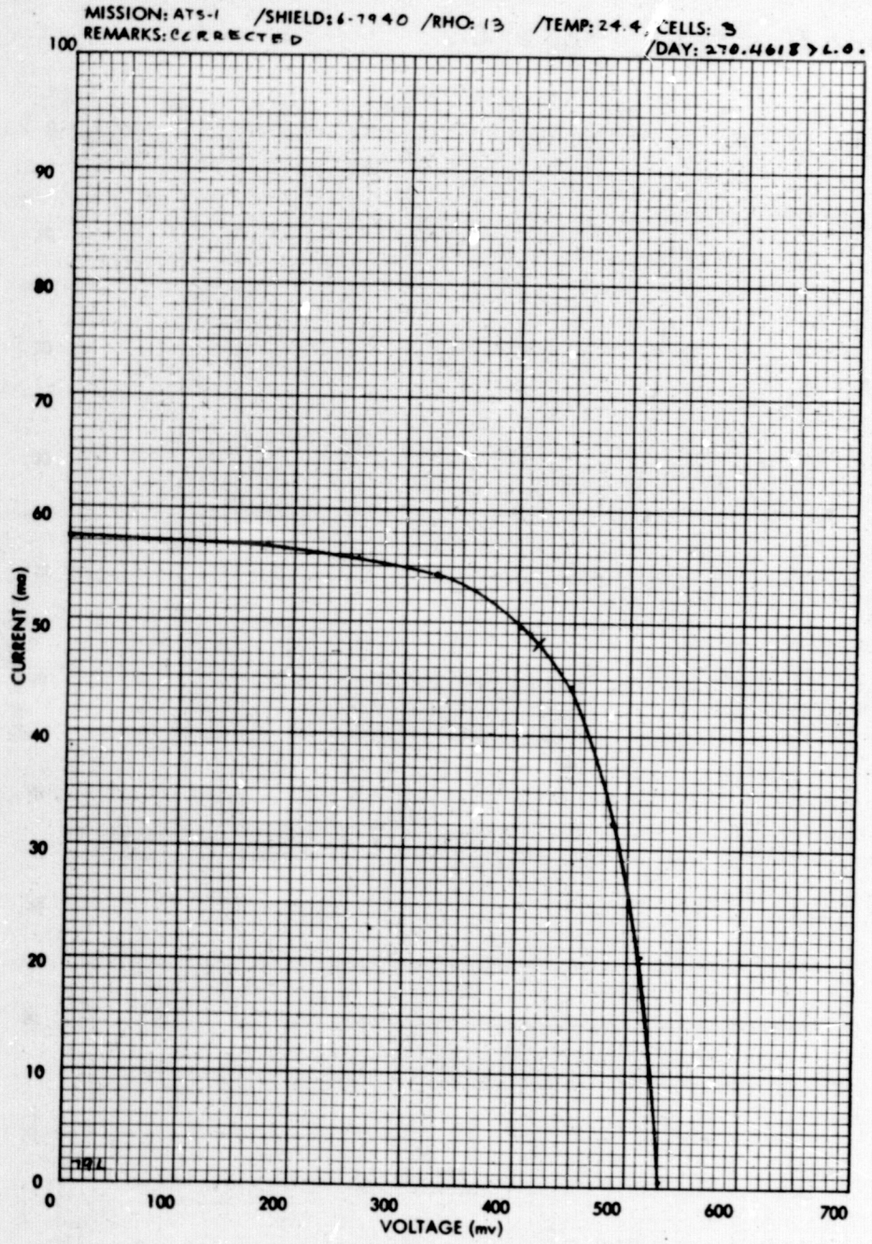


Figure 78. Cell 3, Days 130.2 and 191.5. Corrected Data



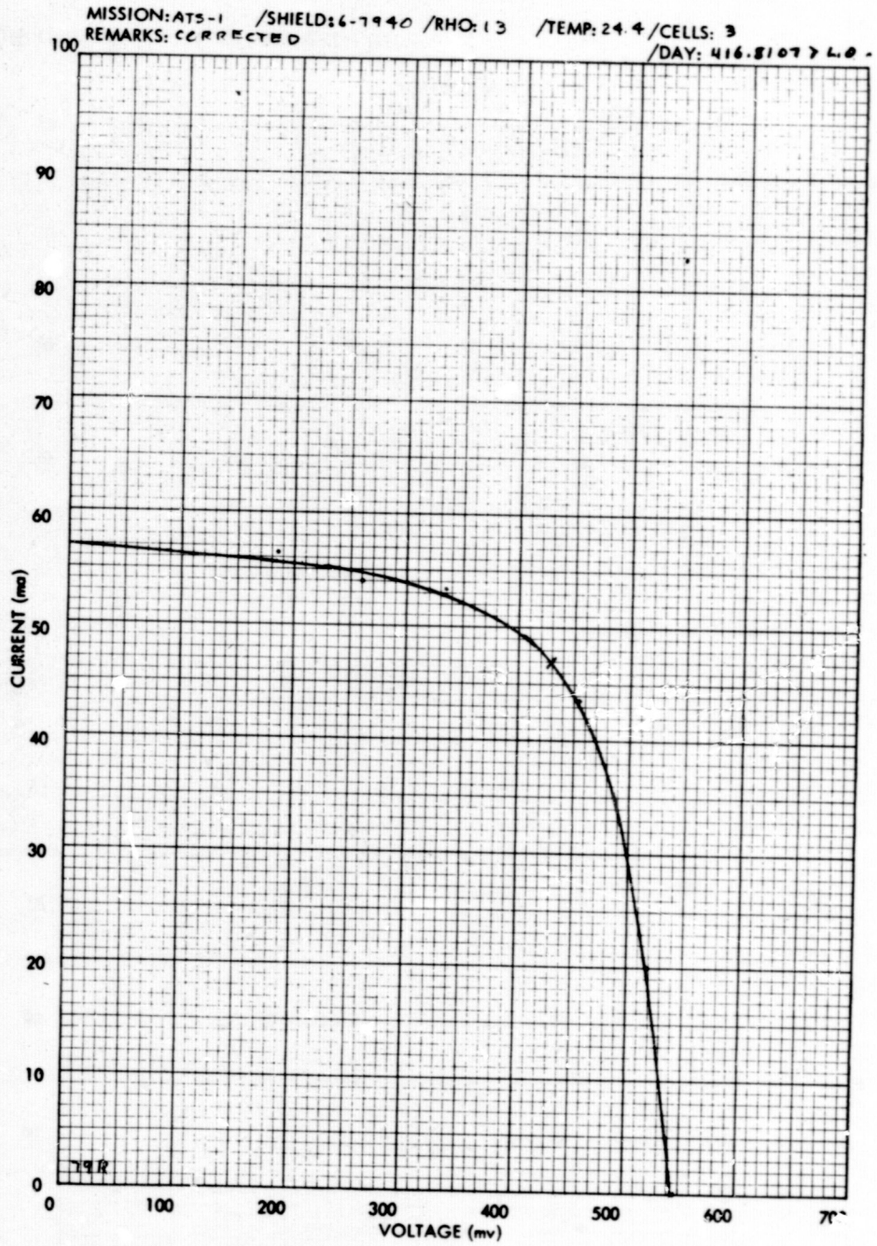
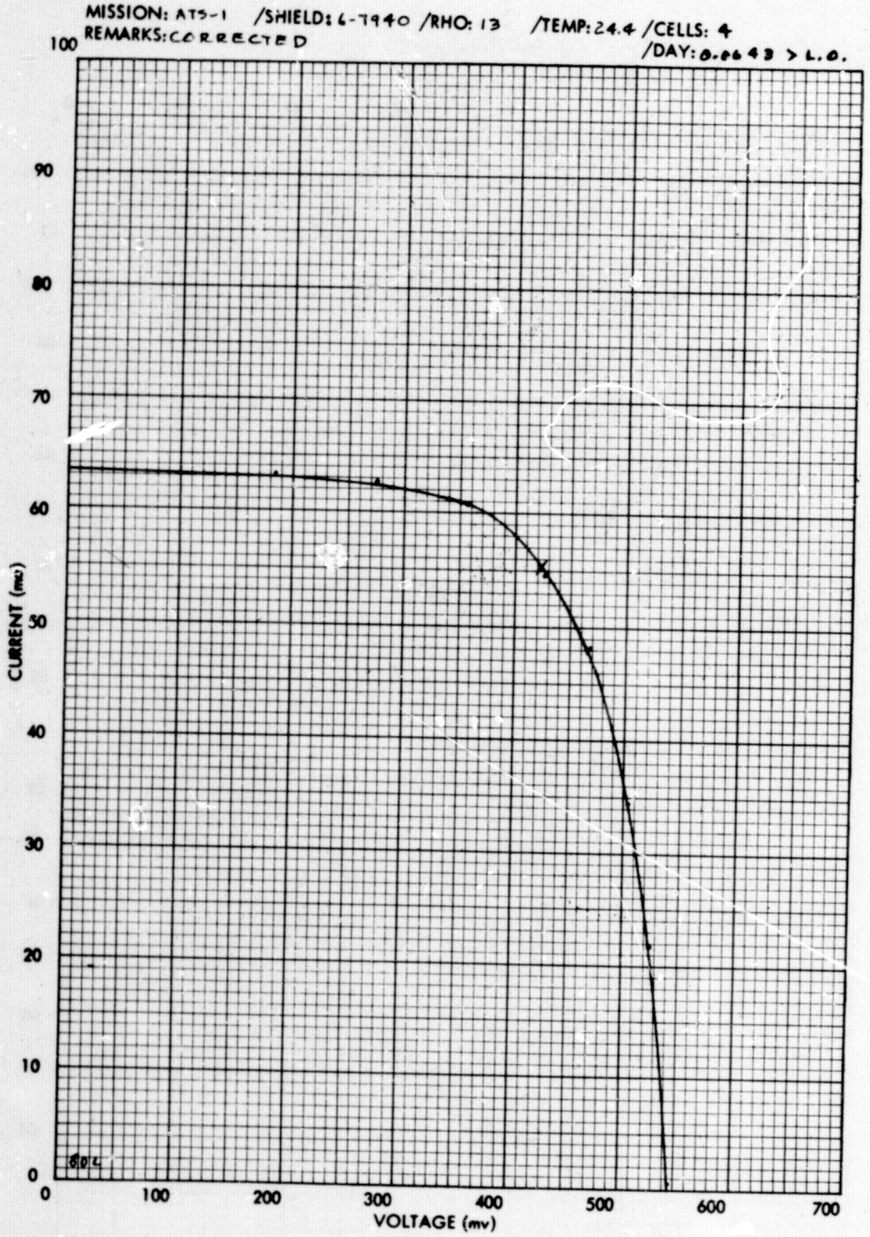
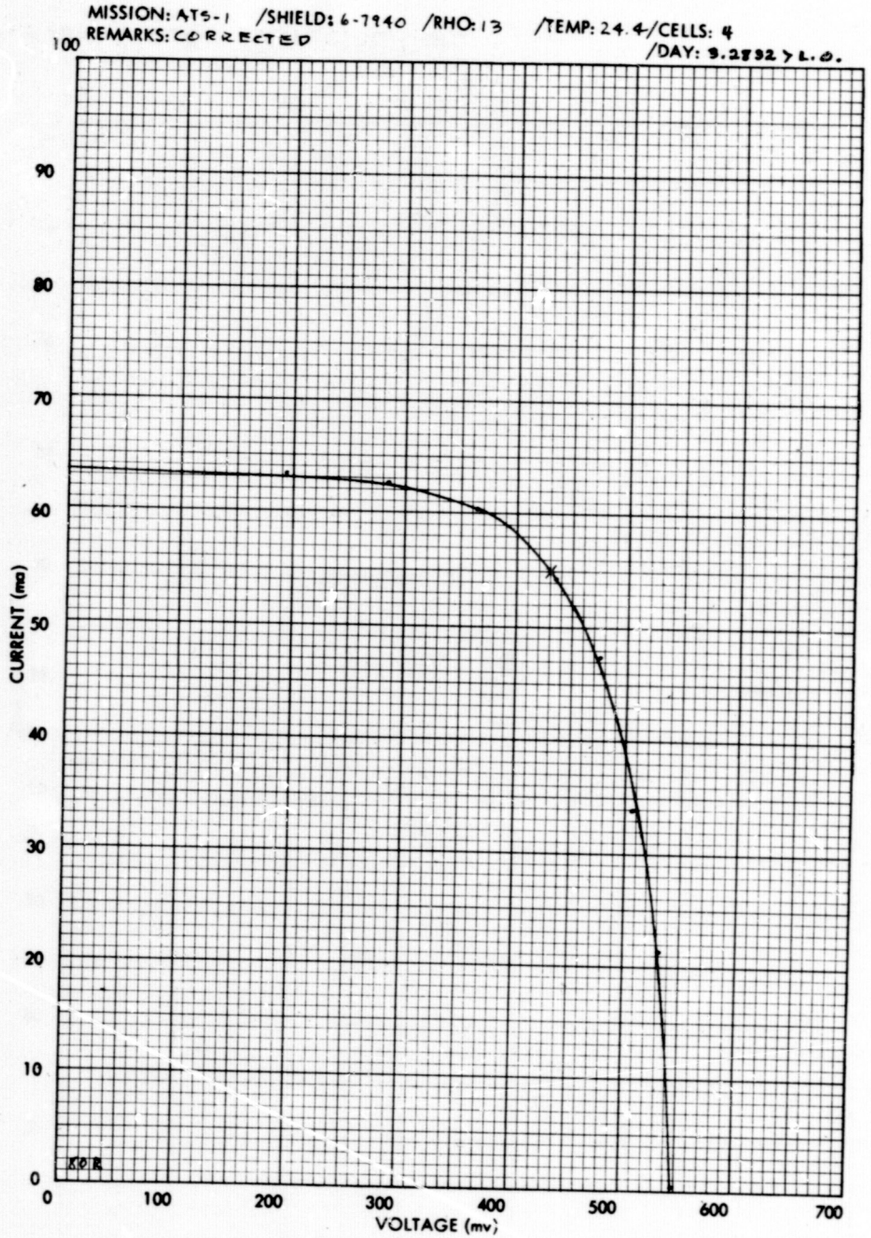


Figure 79. Cell 3, Days 270.4 and 416.8. Corrected Data





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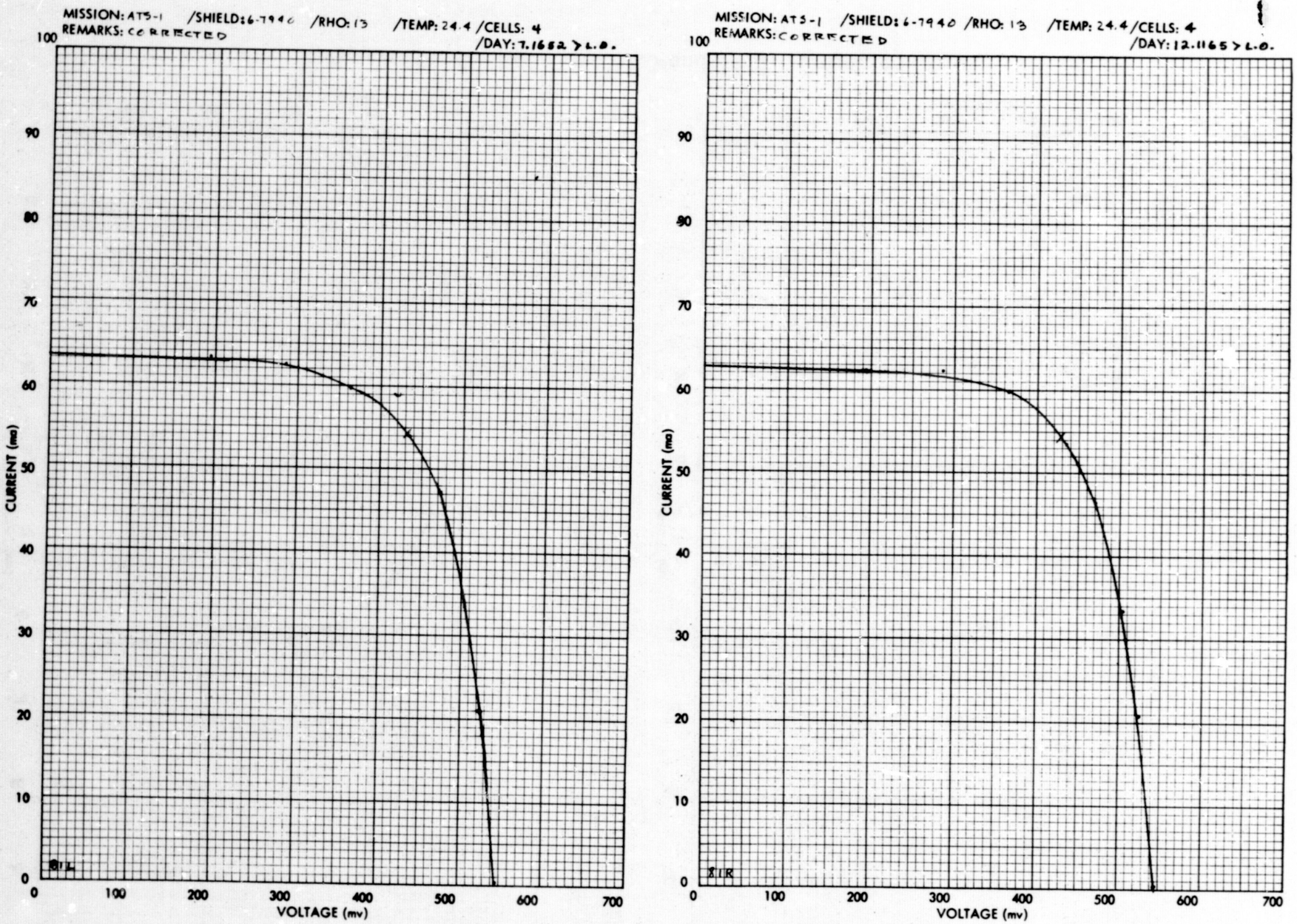
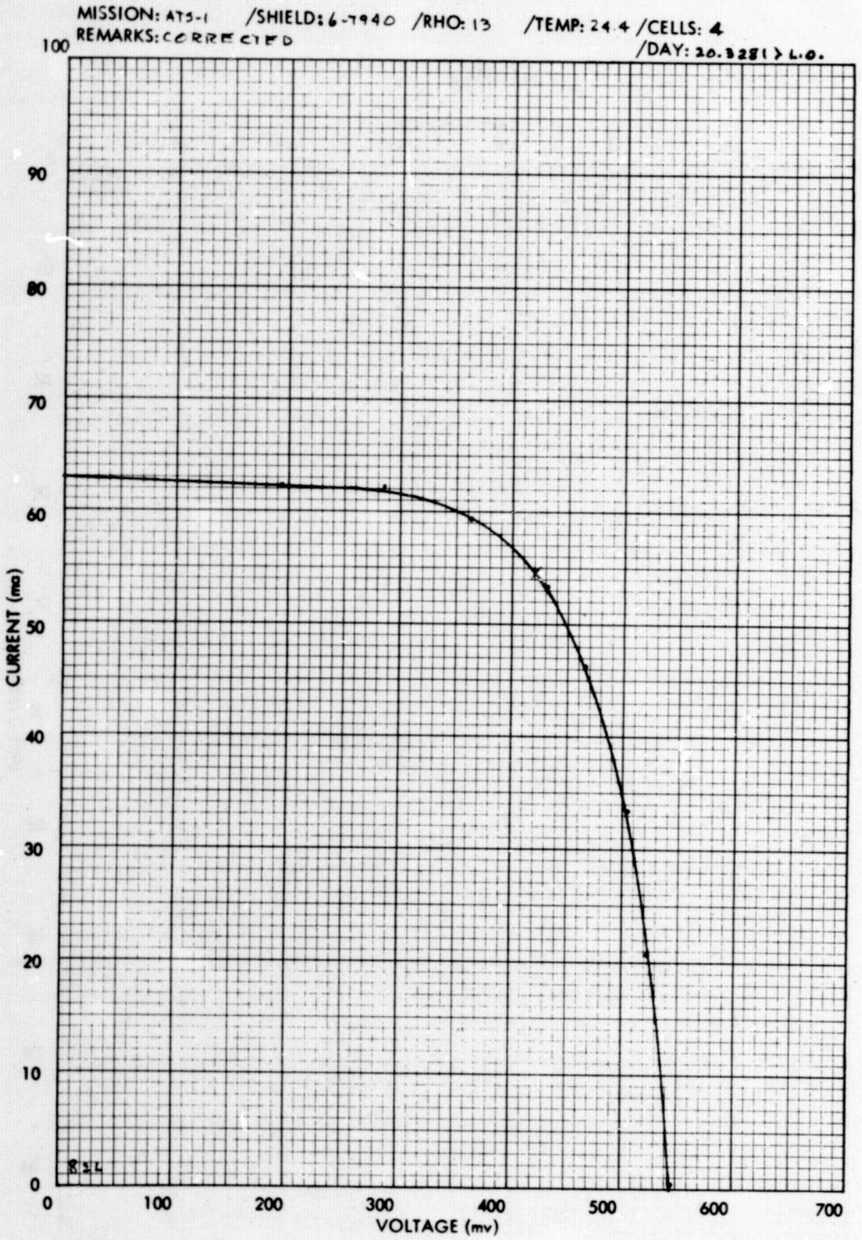


Figure 81. Cell 4, Days 7.1 and 12.1. Corrected Data



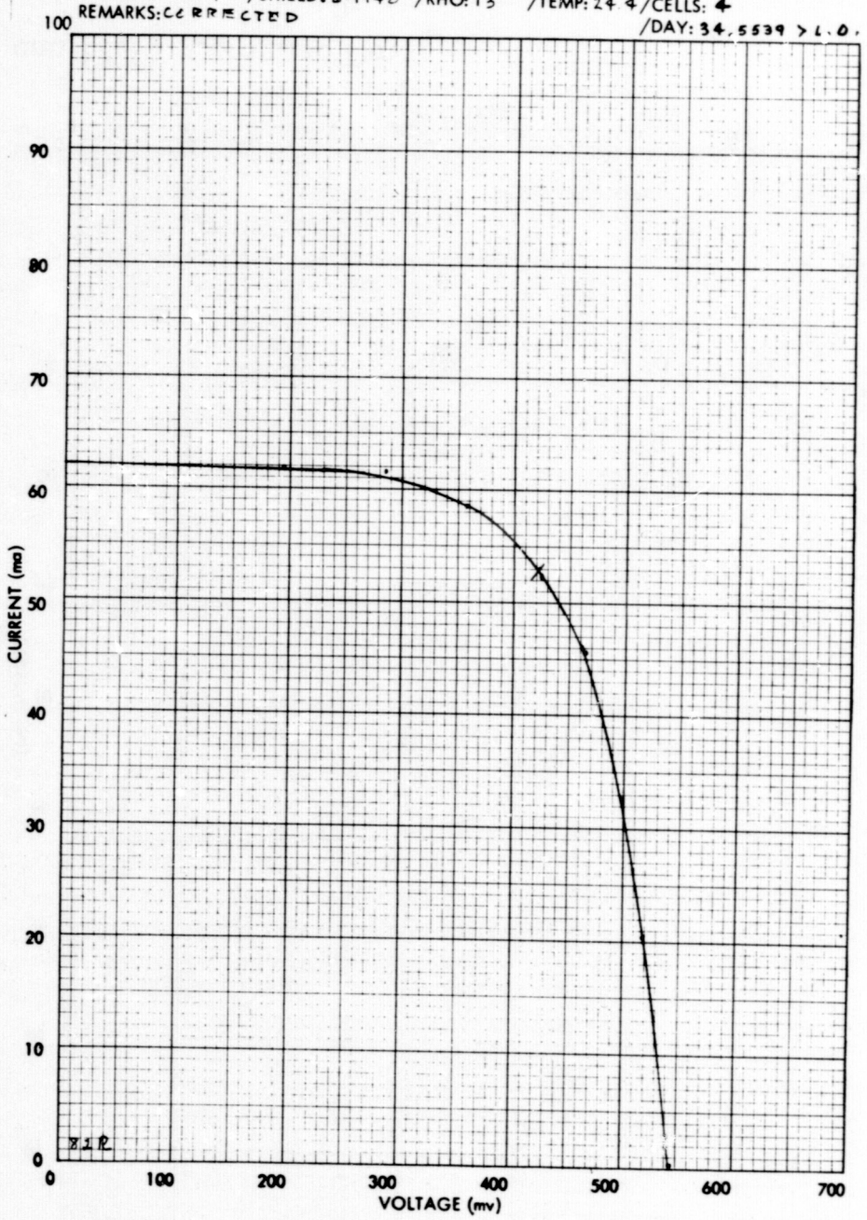
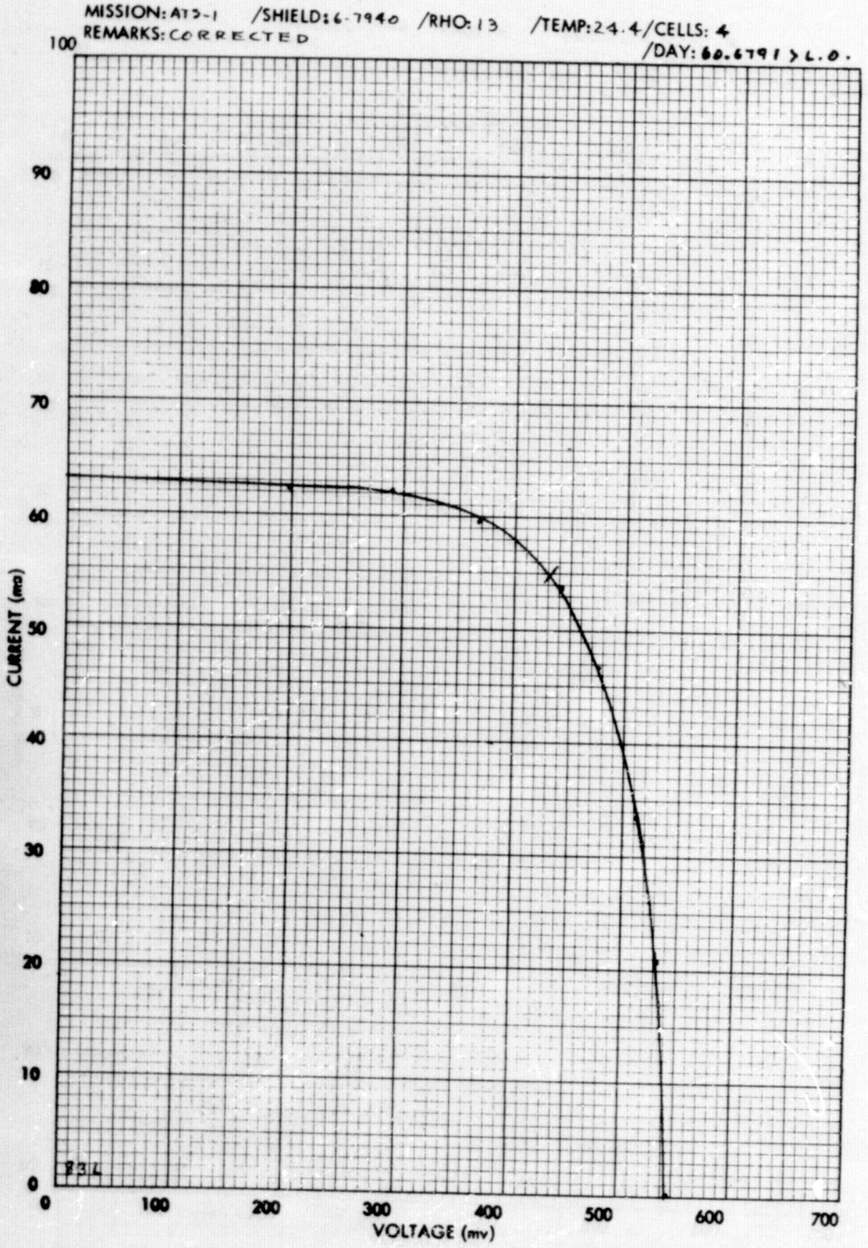


Figure 82. Cell 4, Days 20.3 and 34.5. Corrected Data



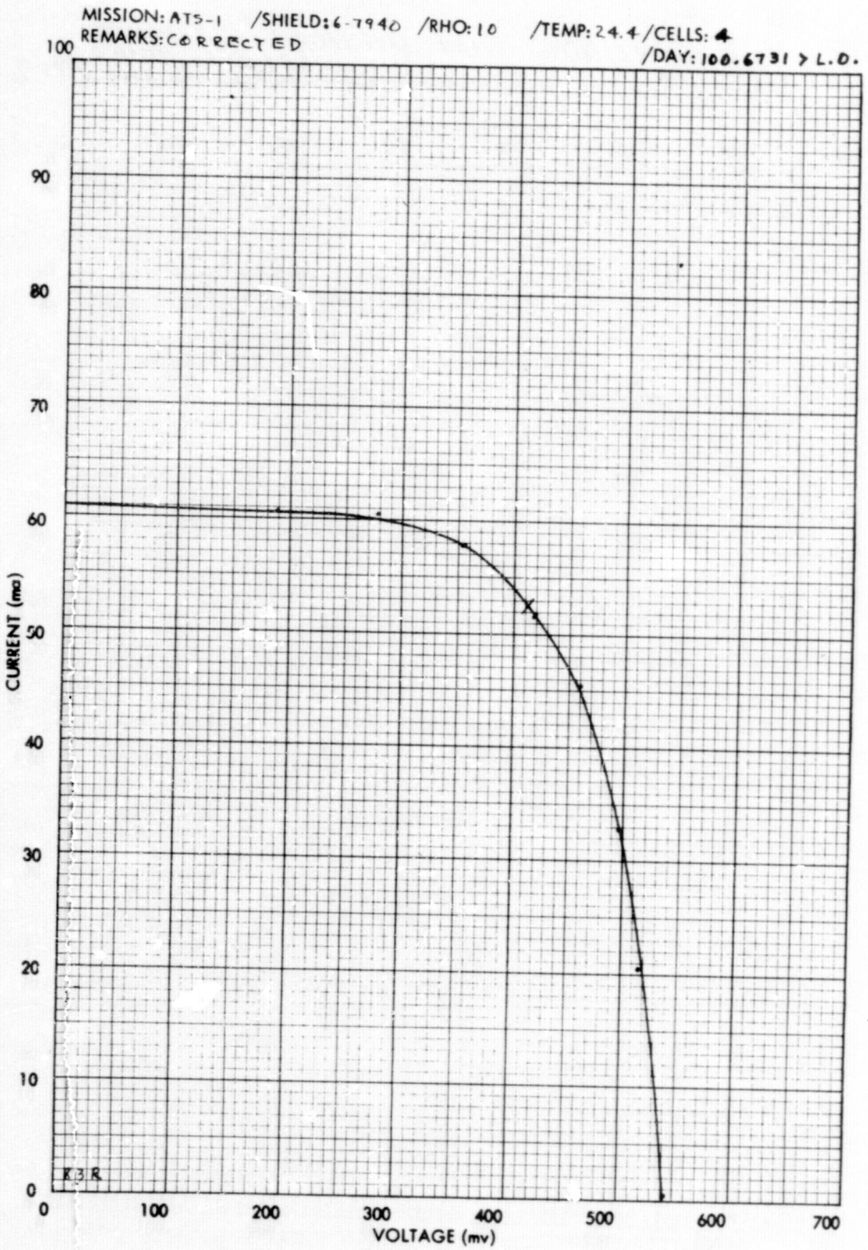
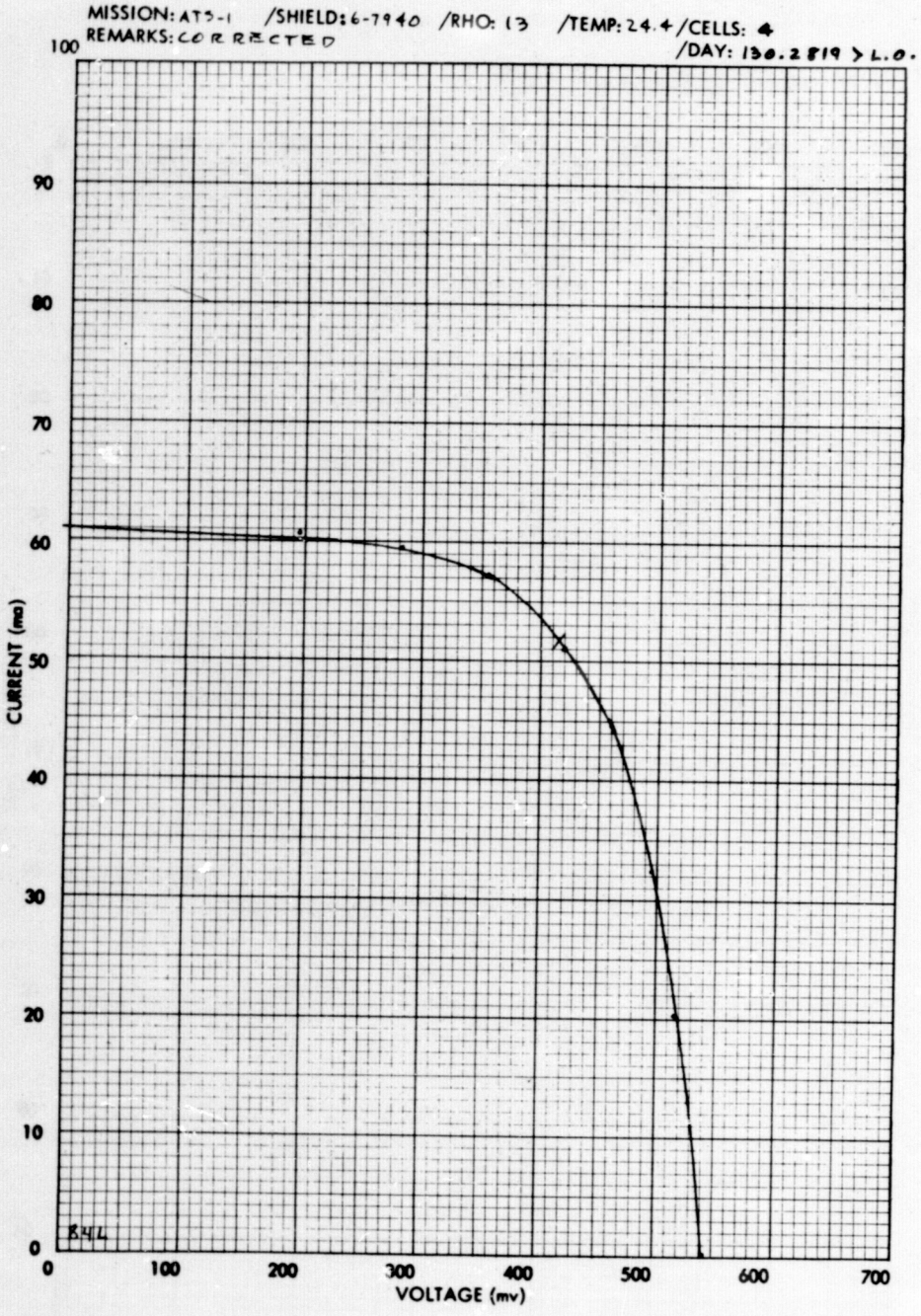


Figure 83. Cell 4, Days 60.6 and 100.6. Corrected Data



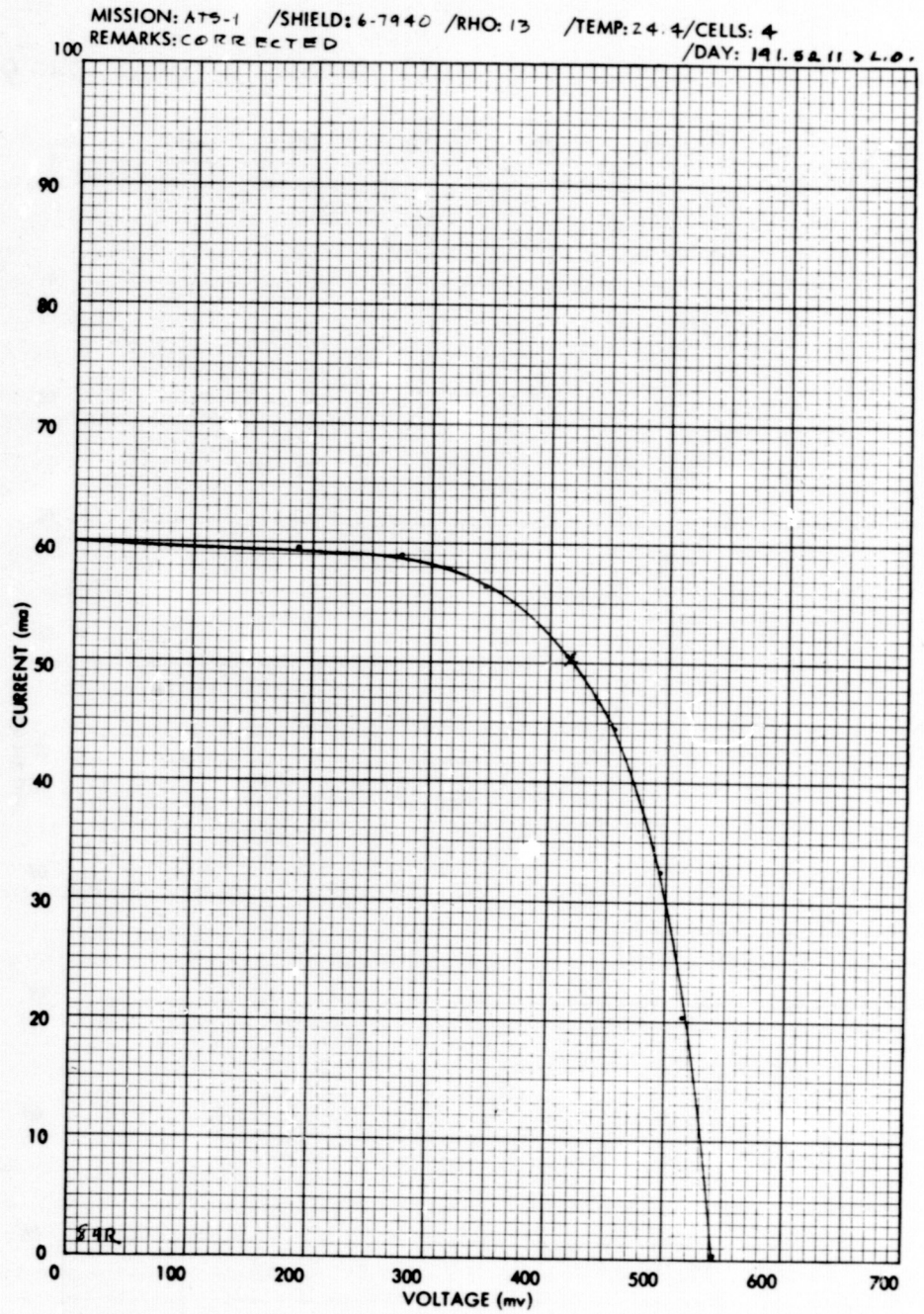
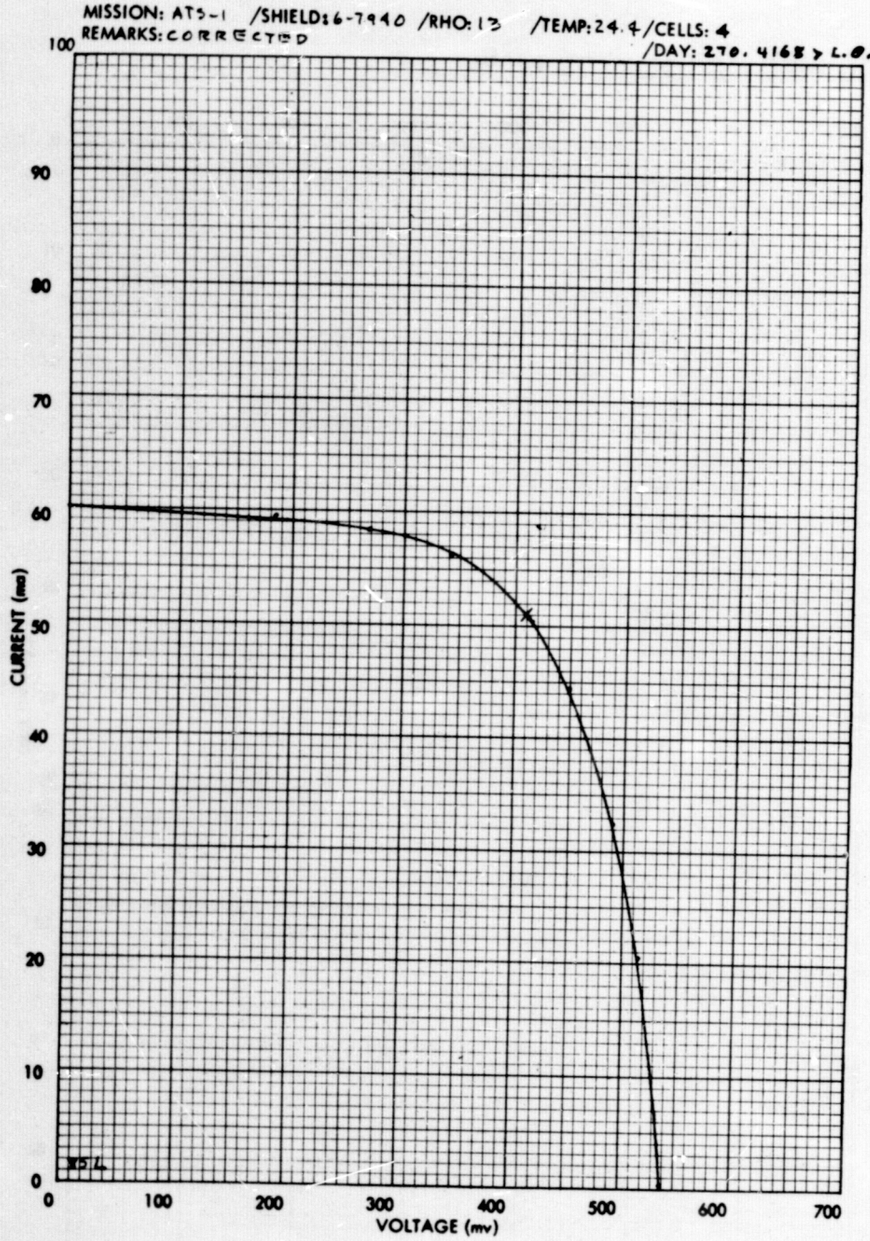


Figure 84. Cell 4, Days 130.2 and 191.5. Corrected Data



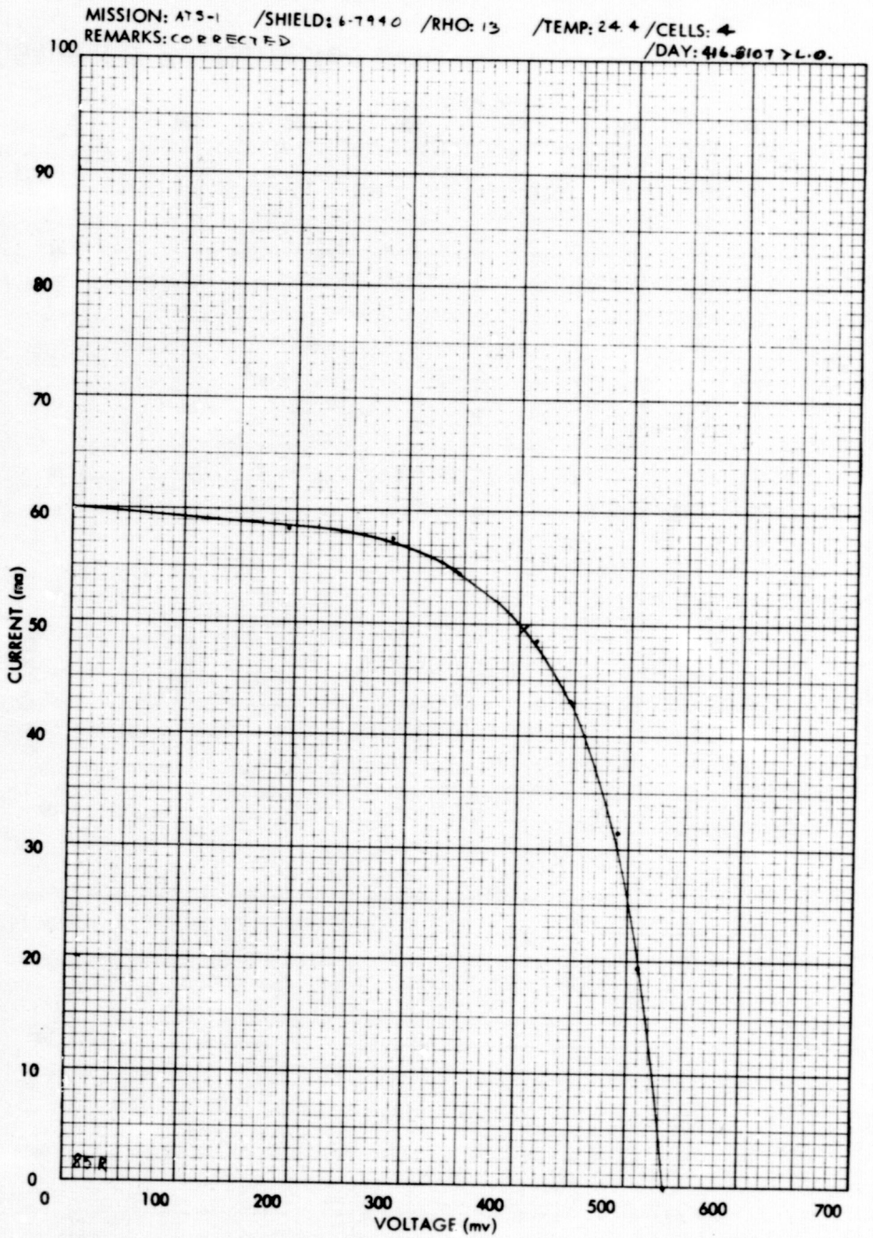


Figure 85. Cell 4, Days 270.4 and 416.8. Corrected Data

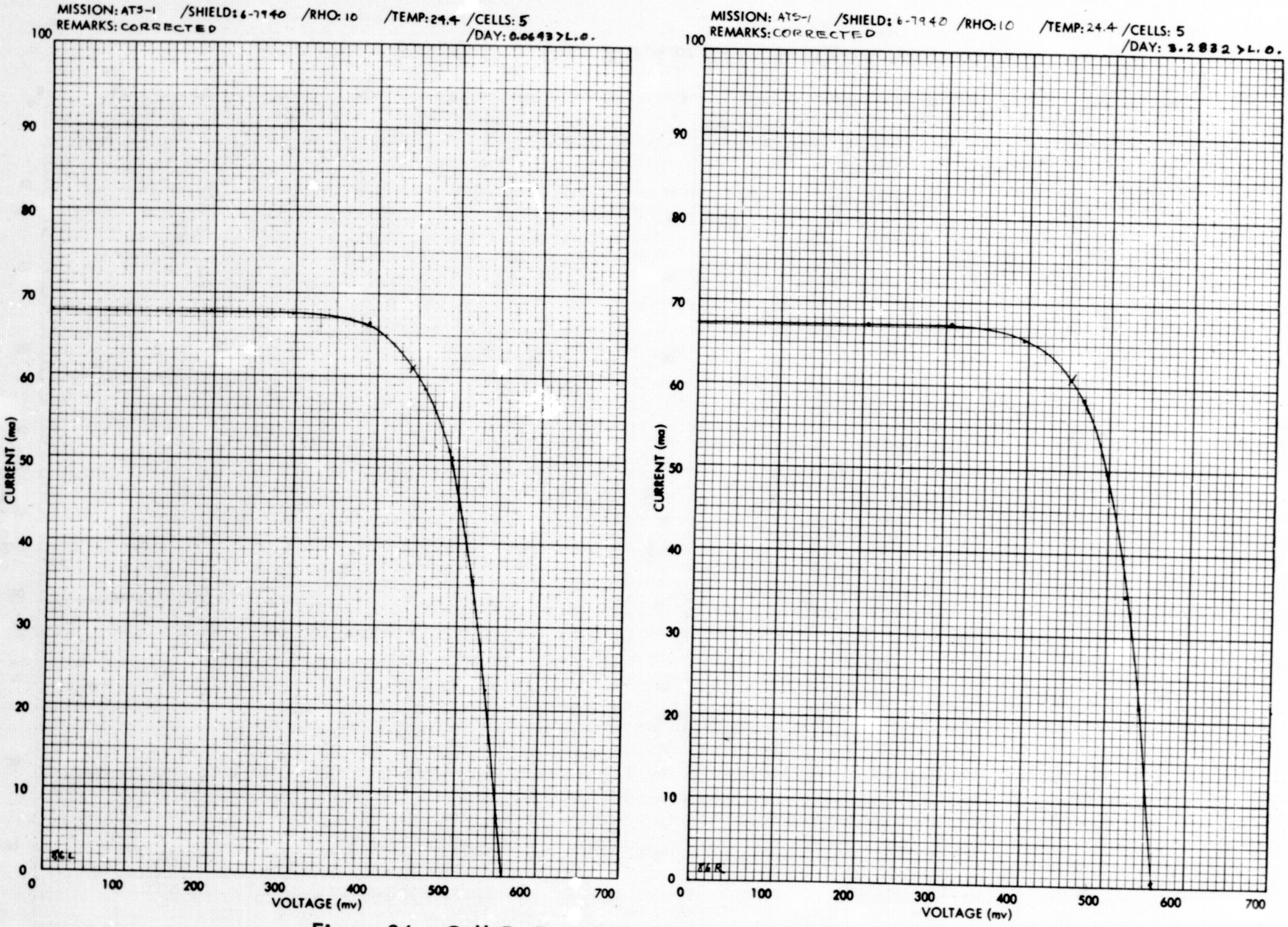
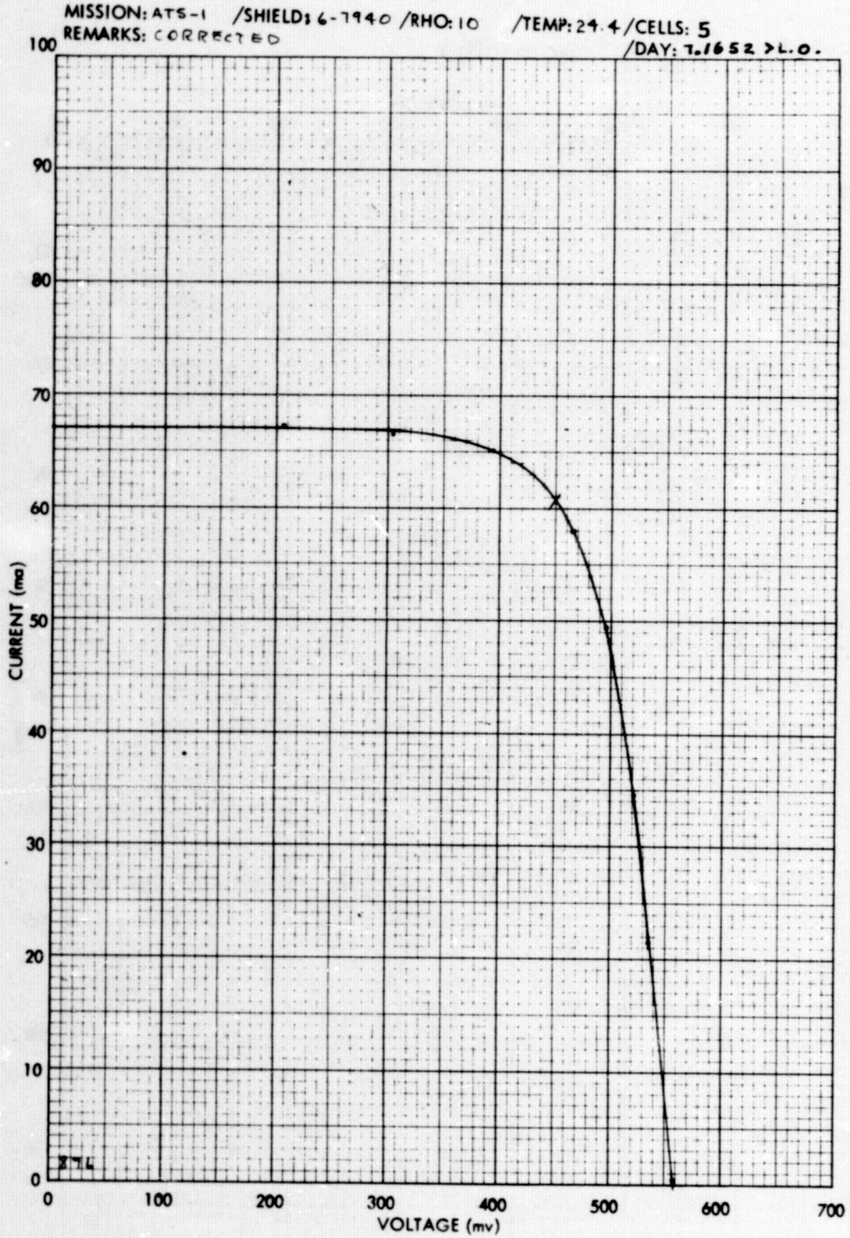


Figure 86. Cell 5, Days 0.064 and 3.2. Corrected Data



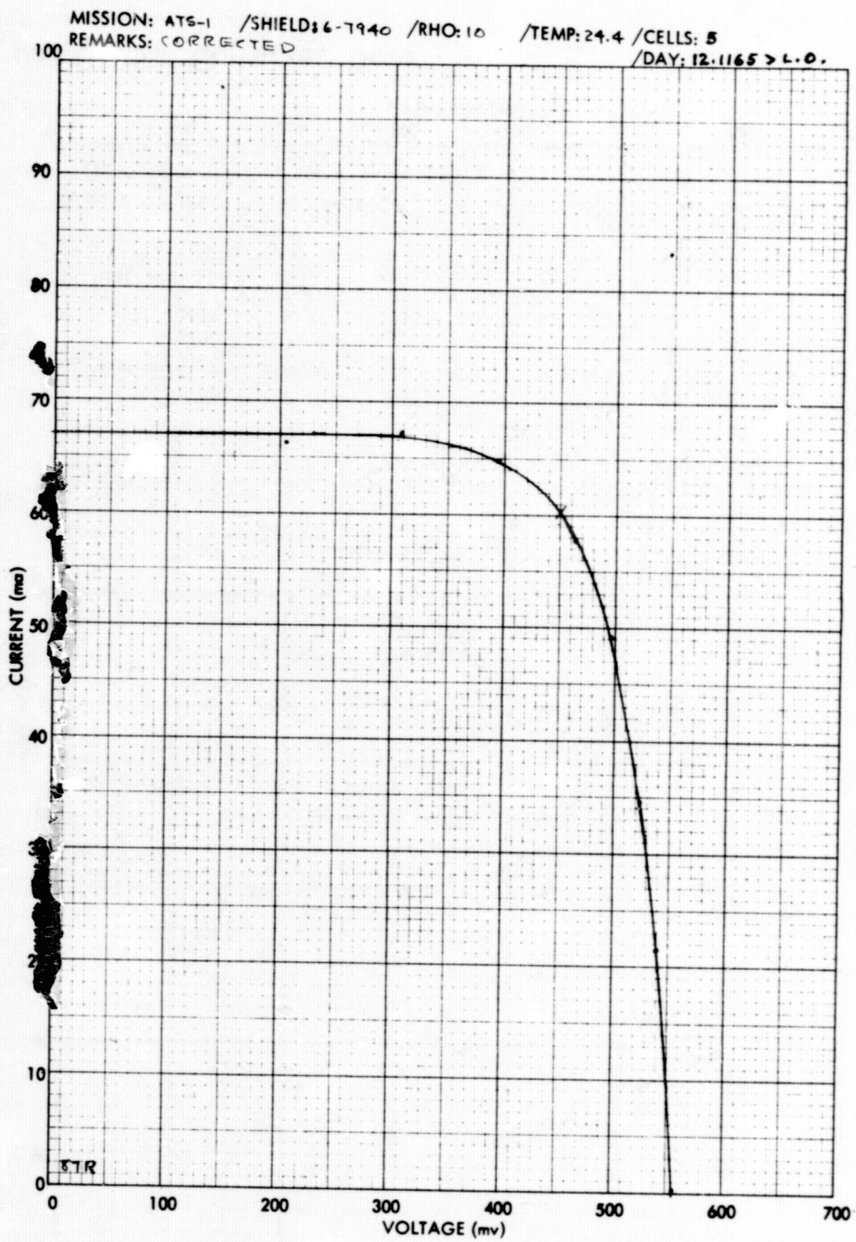
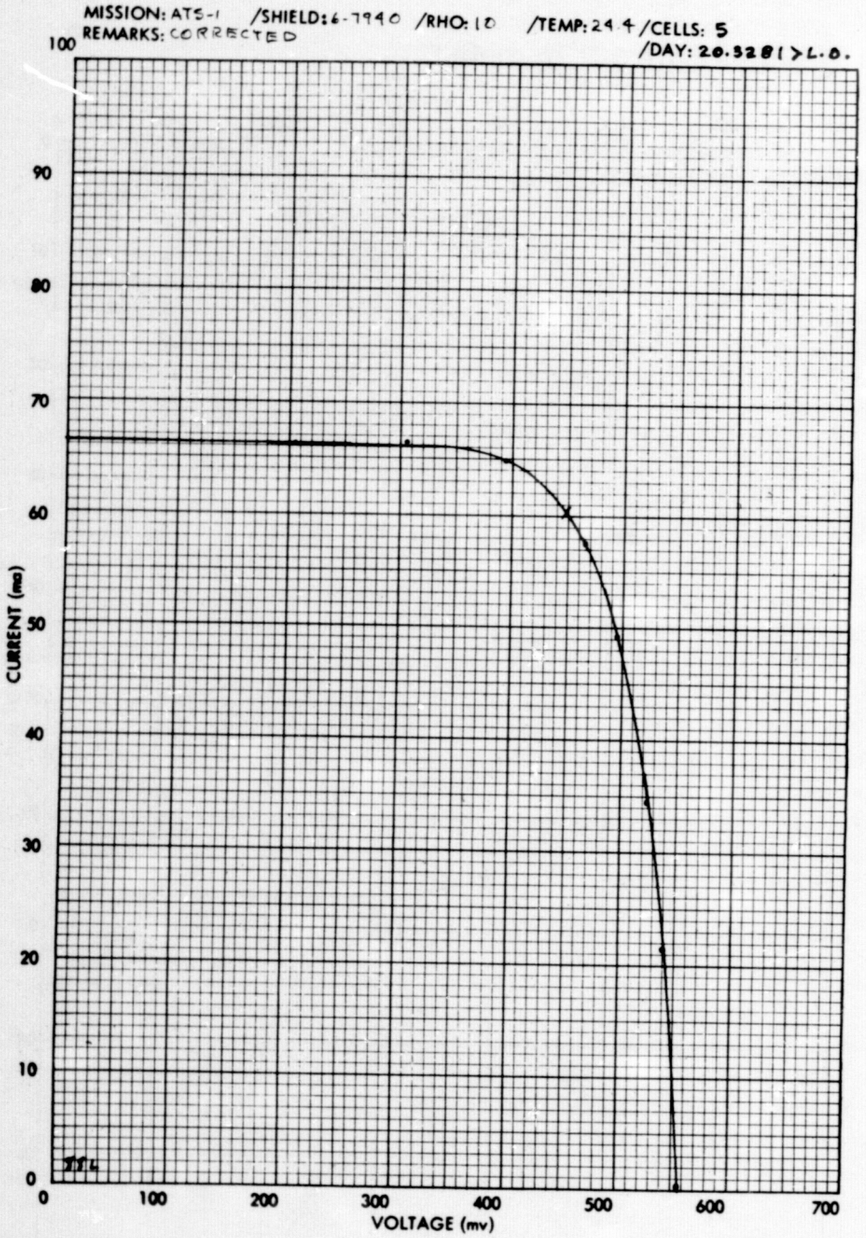


Figure 87. Cell 5, Days 7.1 and 12.1. Corrected Data



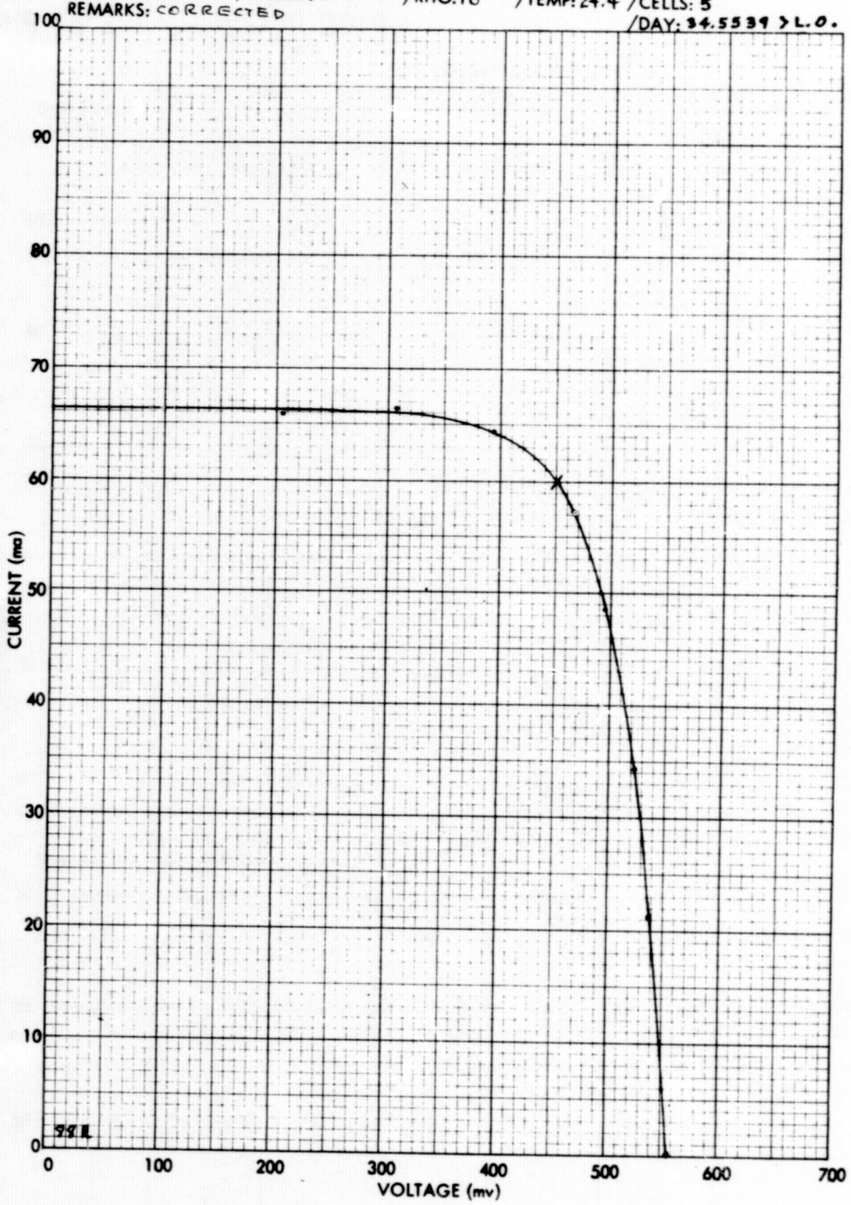
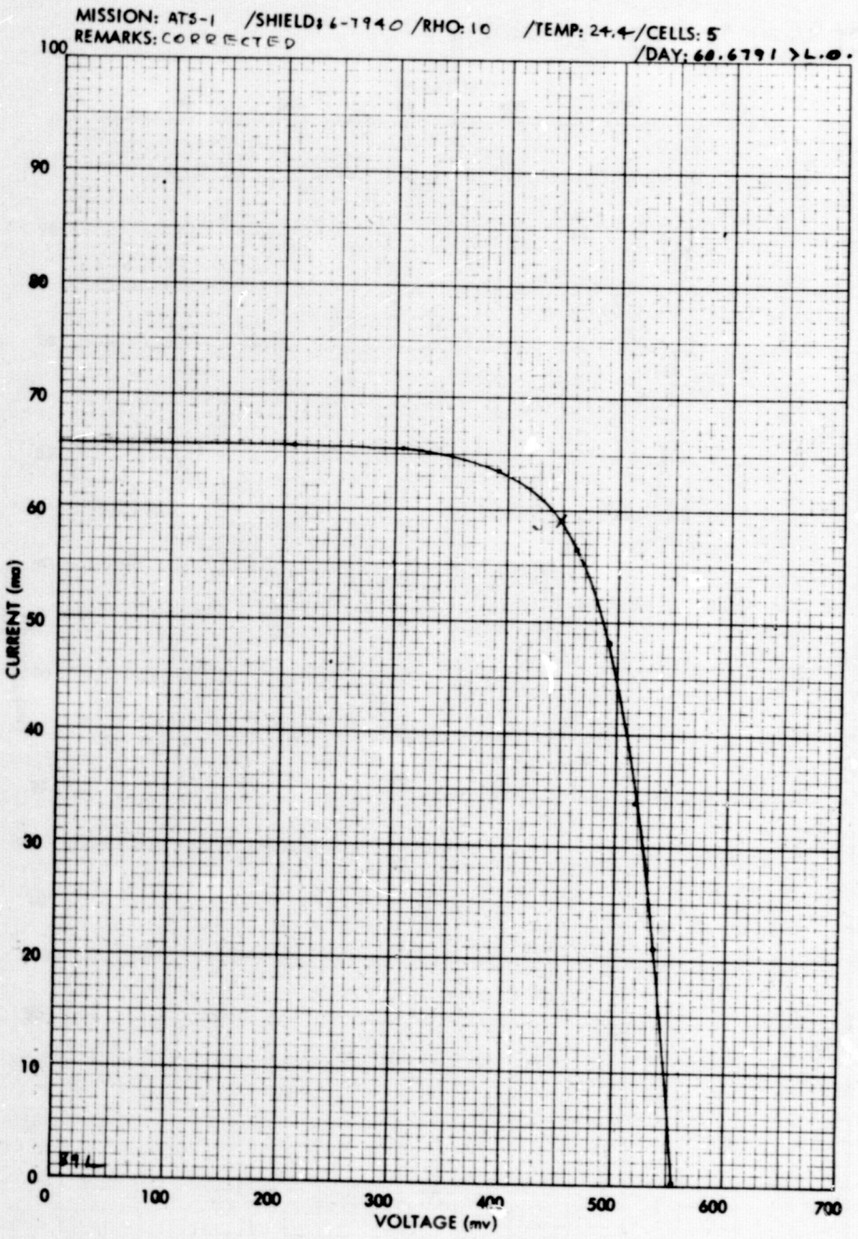


Figure 88. Cell 5, Days 20.3 and 34.5. Corrected Data



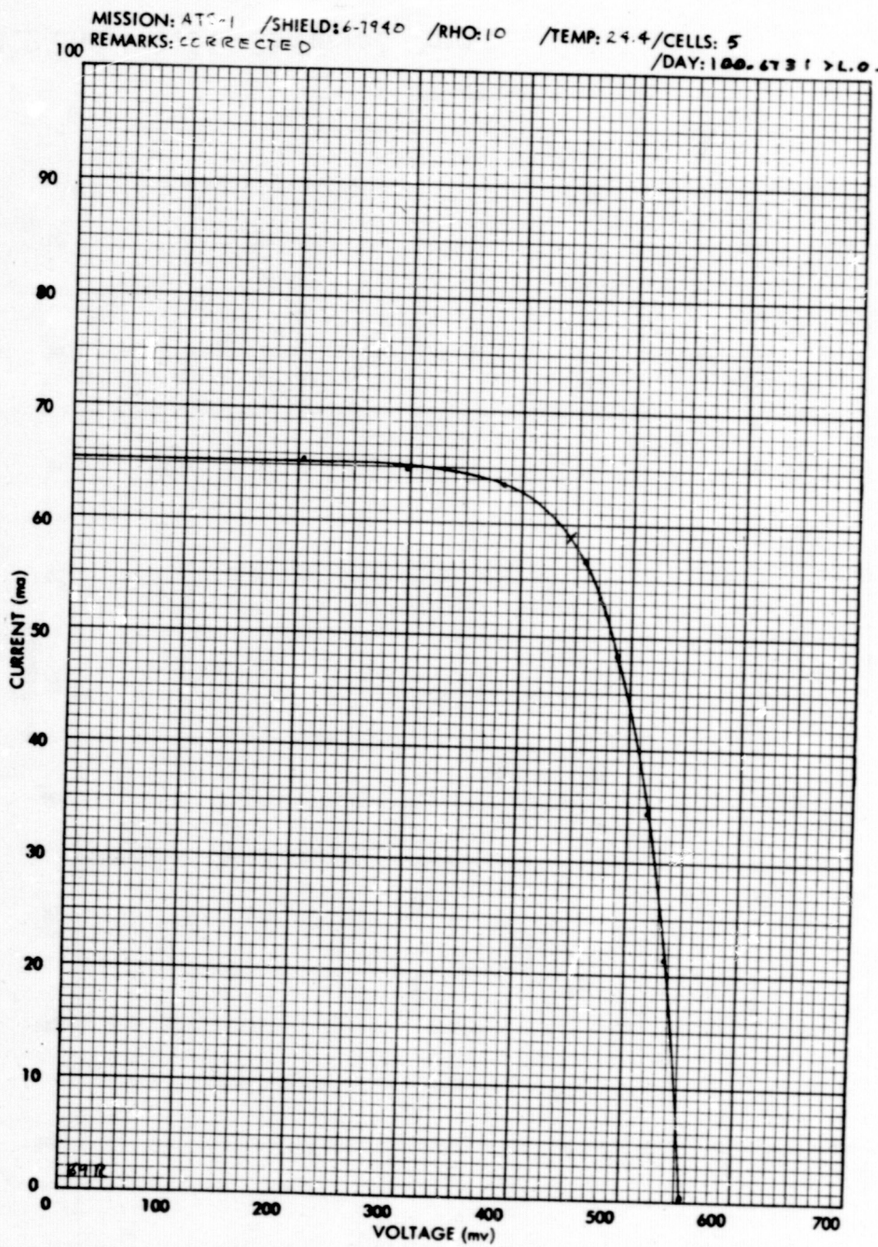
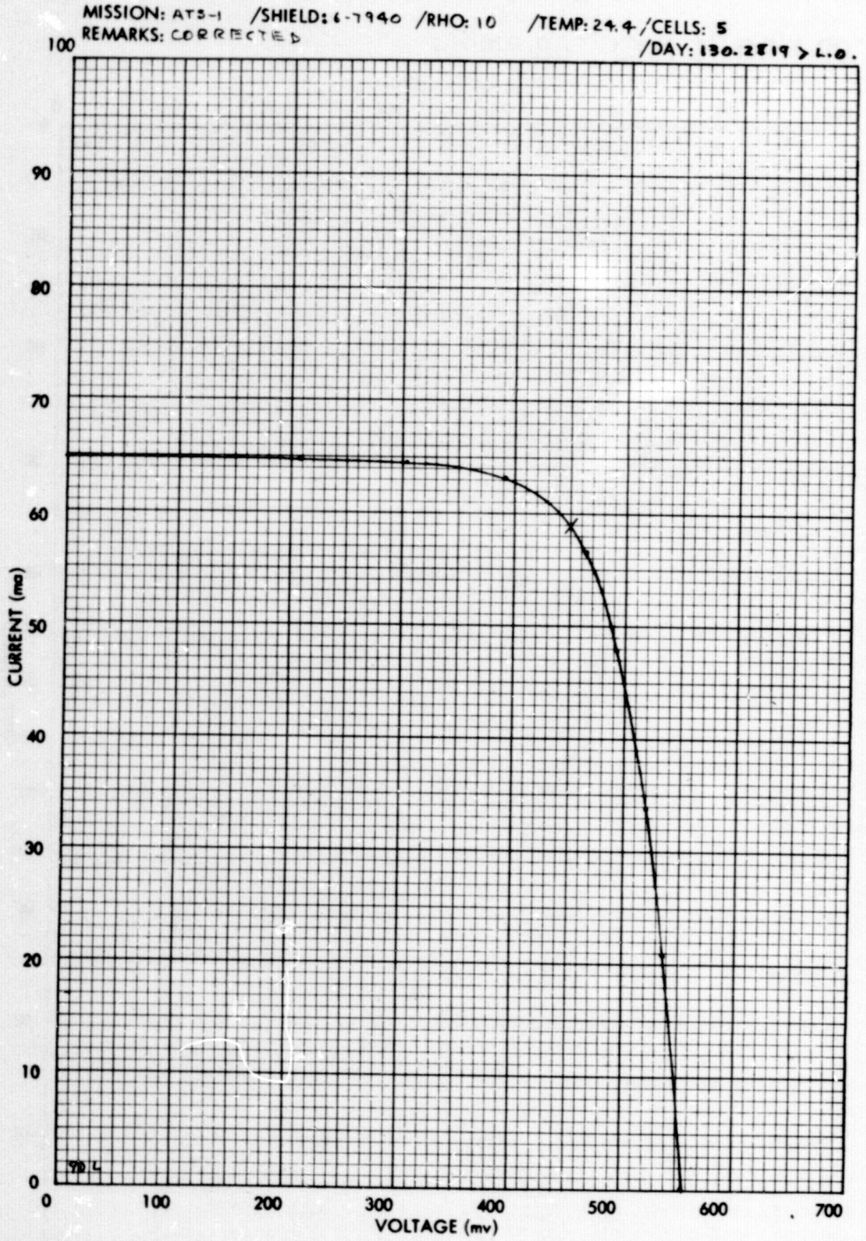


Figure 89. Cell 5, Days 60.6 and 100.6. Corrected Data



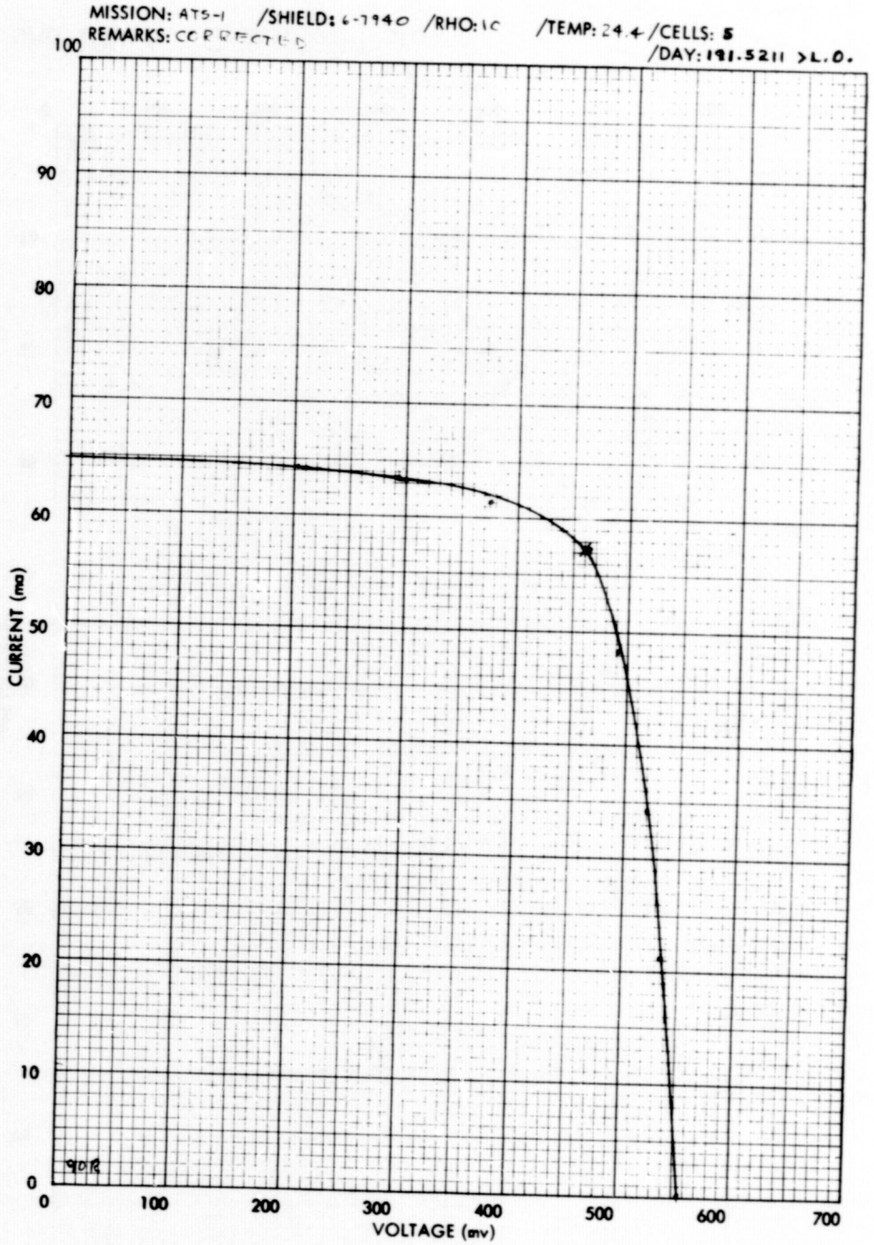
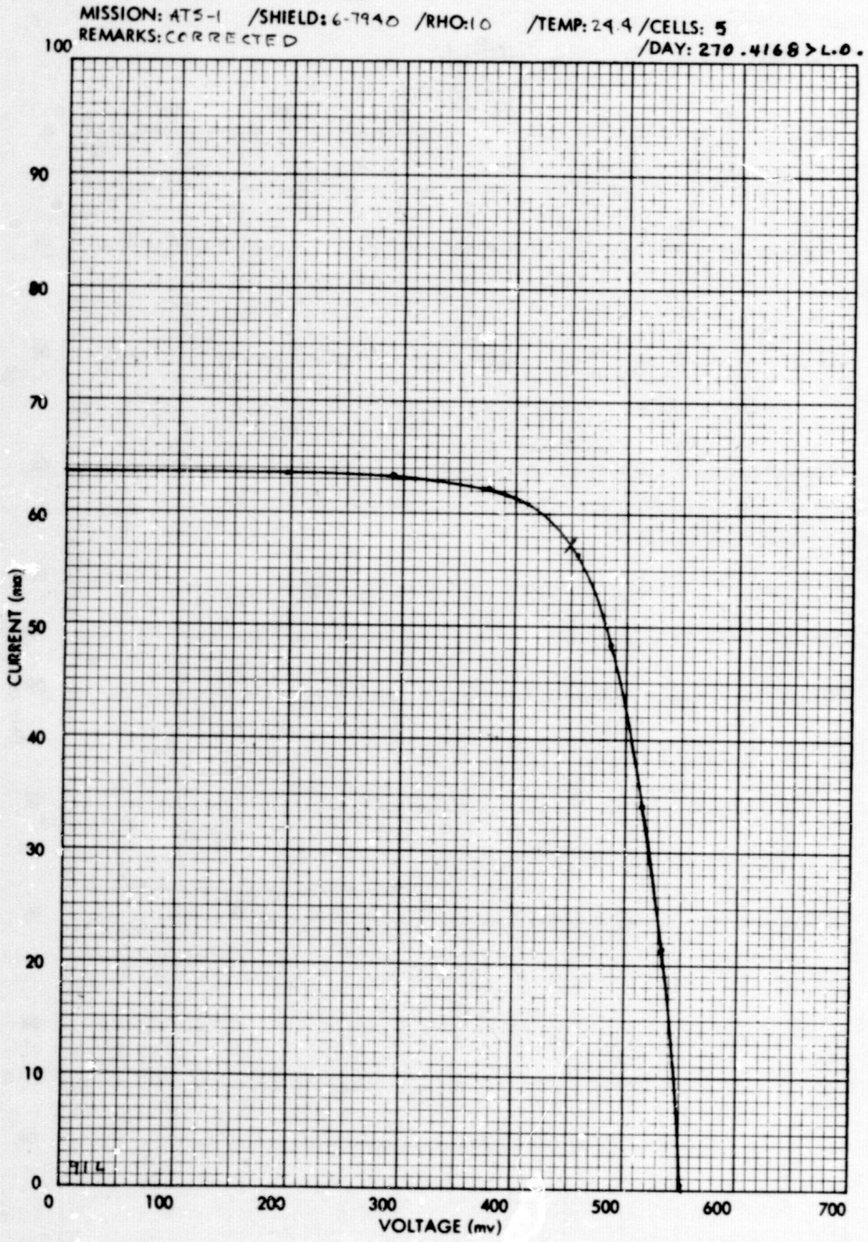


Figure 90. Cell 5, Days 130.2 and 191.5. Corrected Data



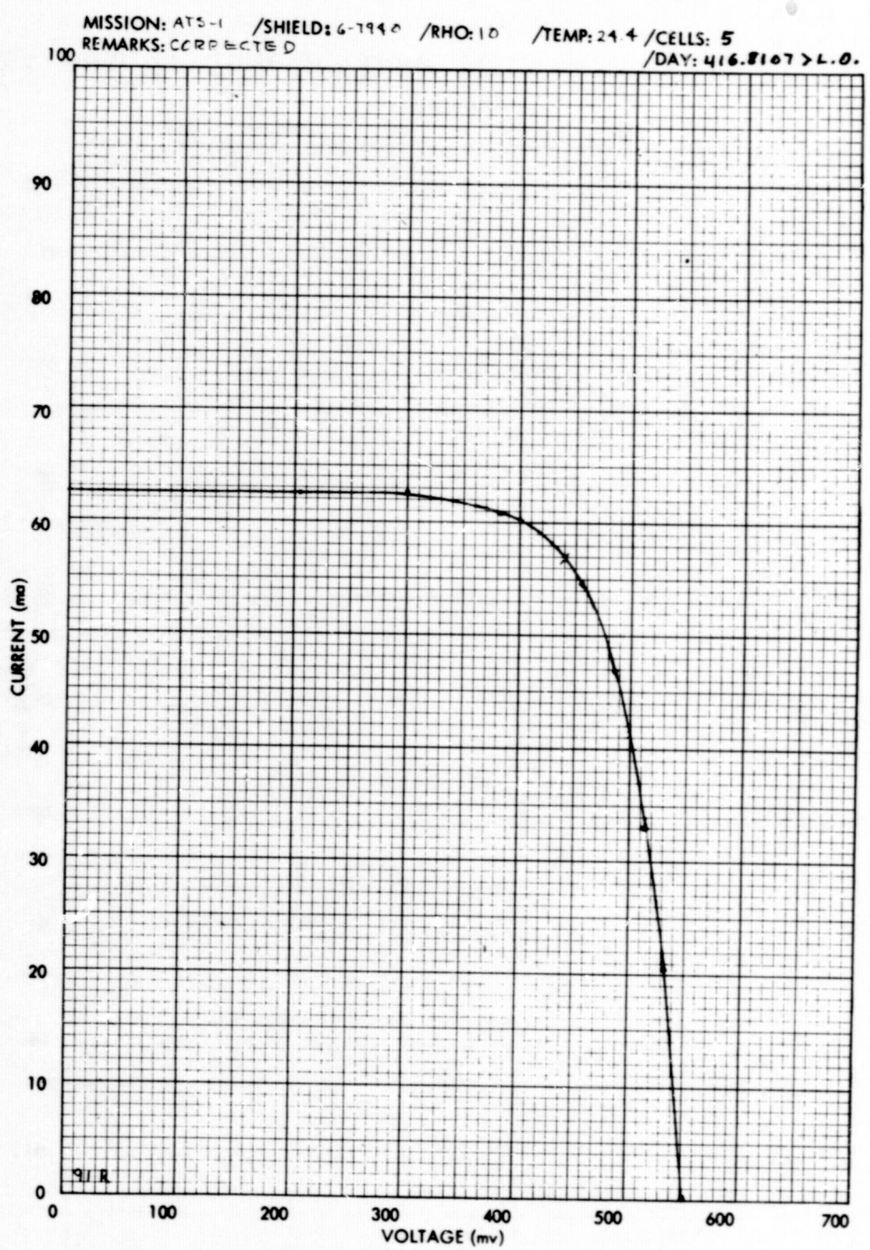
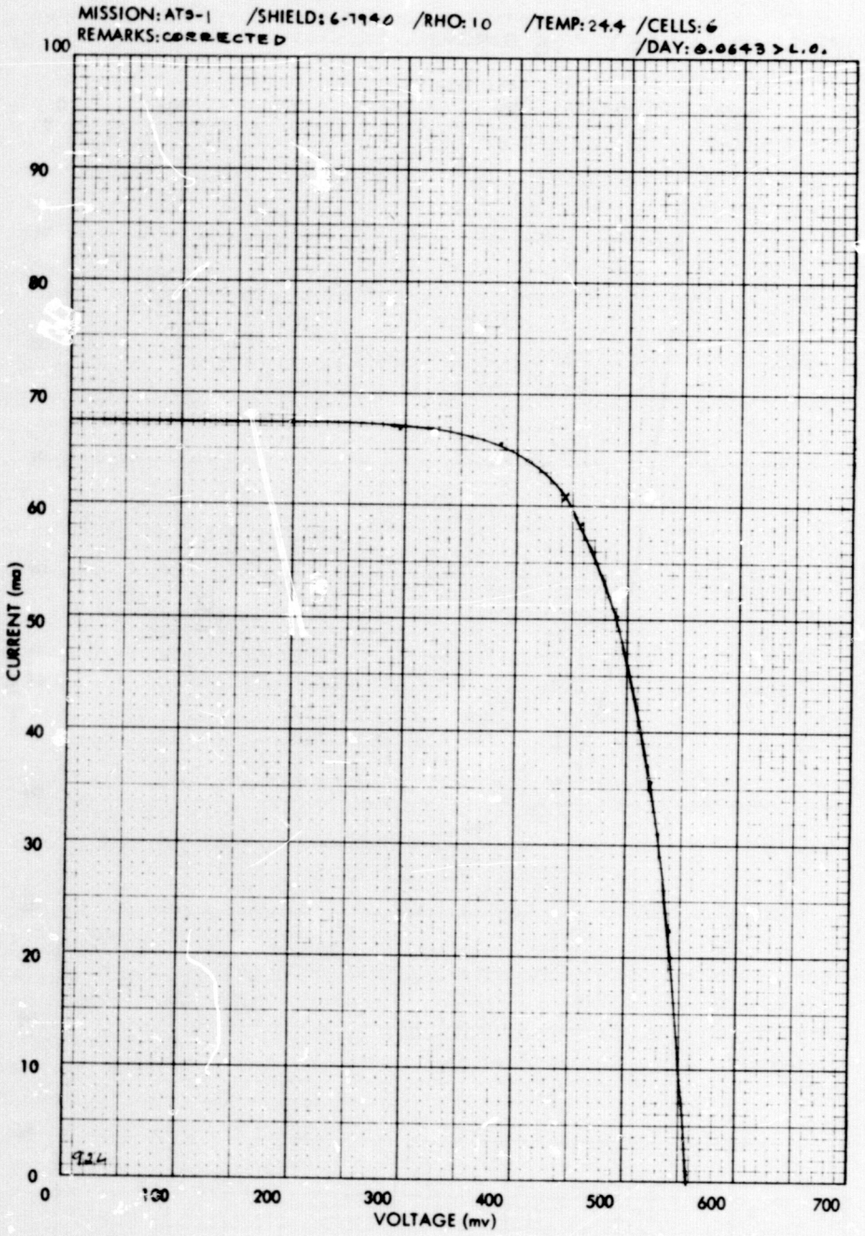


Figure 91. Cell 5, Days 270.4 and 416.8. Corrected Data



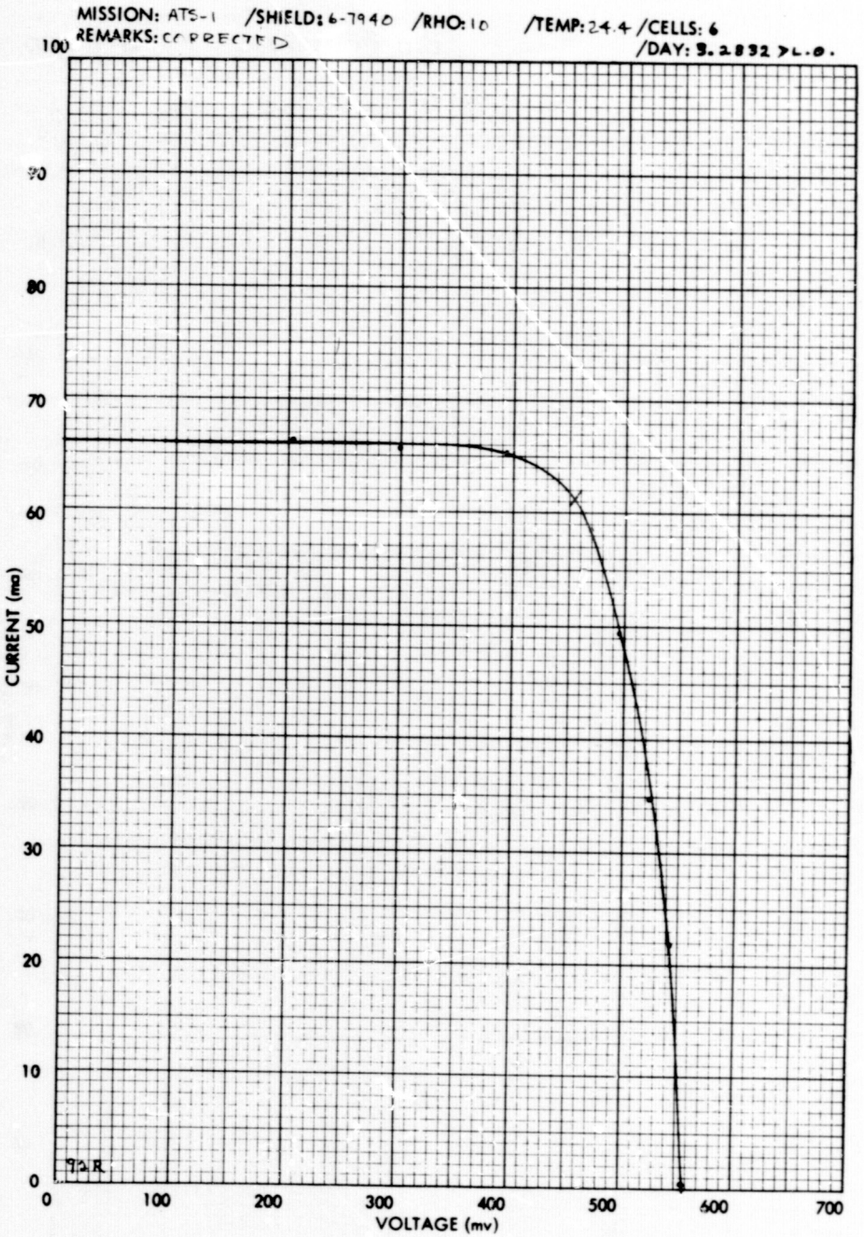
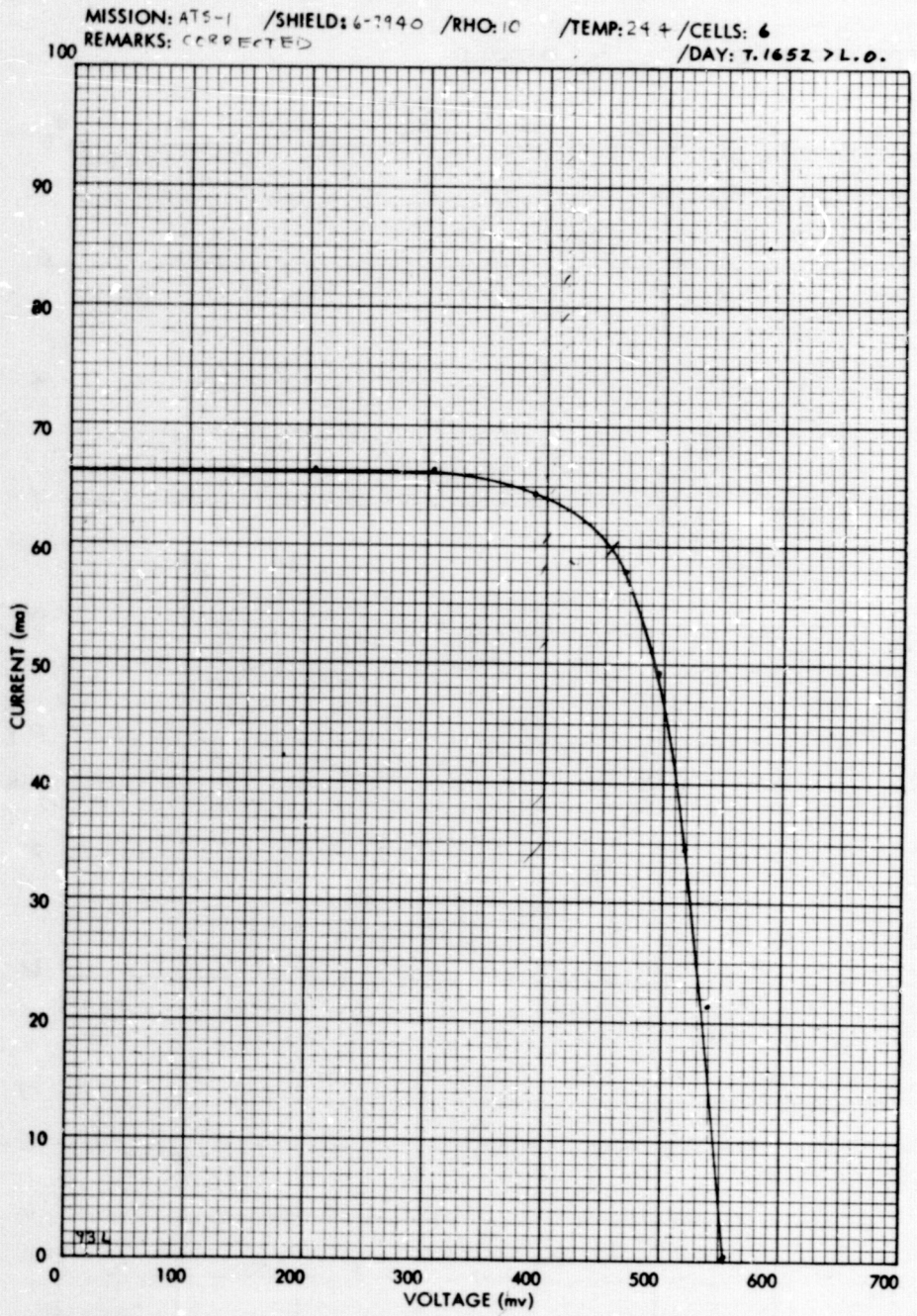


Figure 92. Cell 6, Days 0.064 and 3.2. Corrected Data



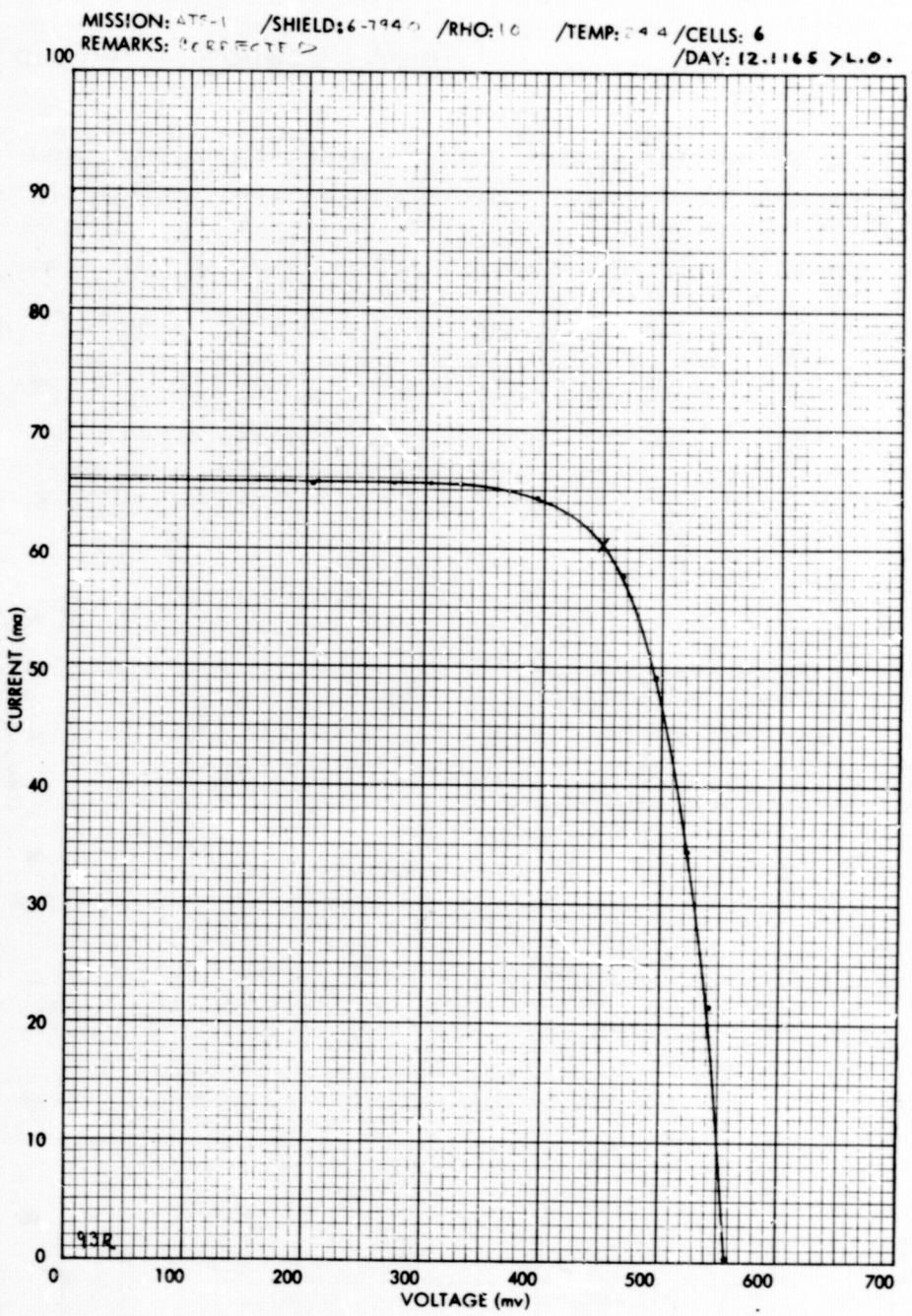
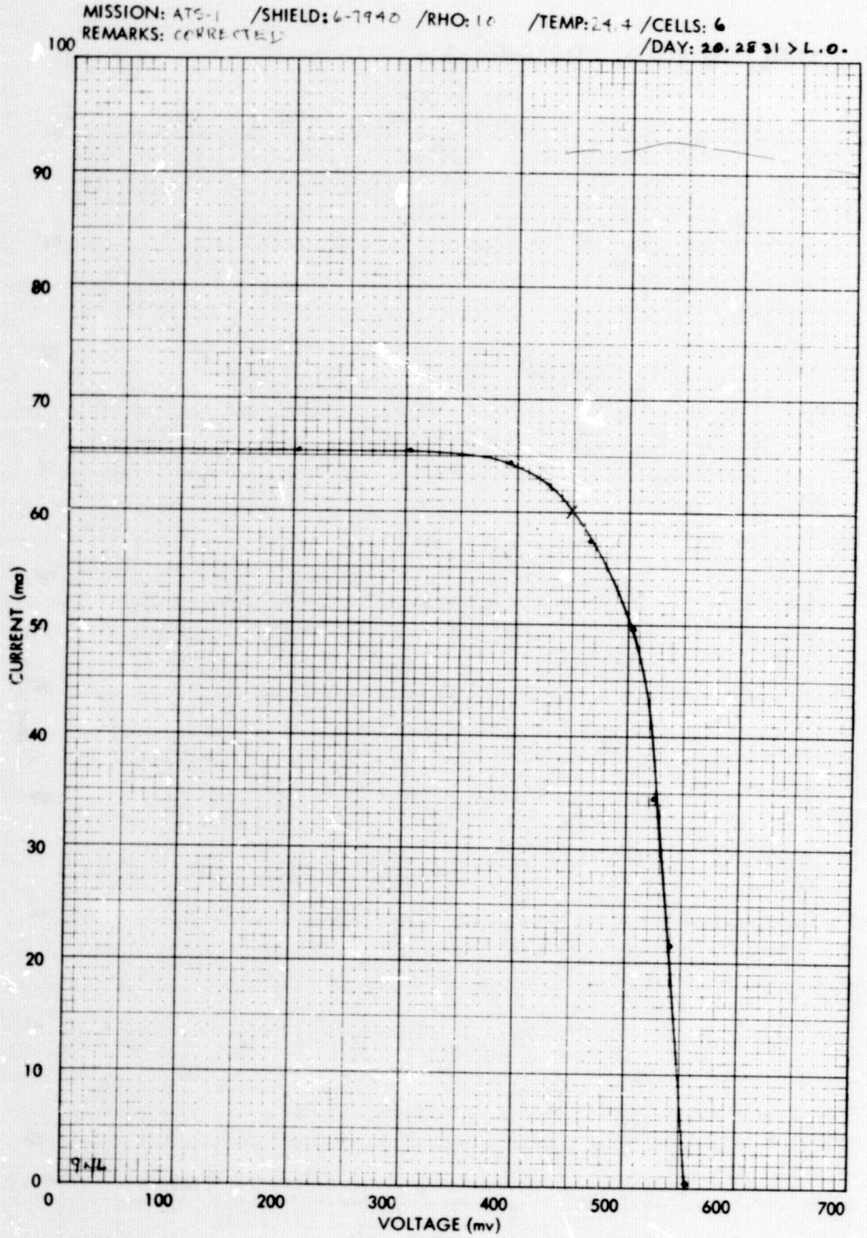


Figure 93. Cell 6, Days 7.1 and 12.1. Corrected Data



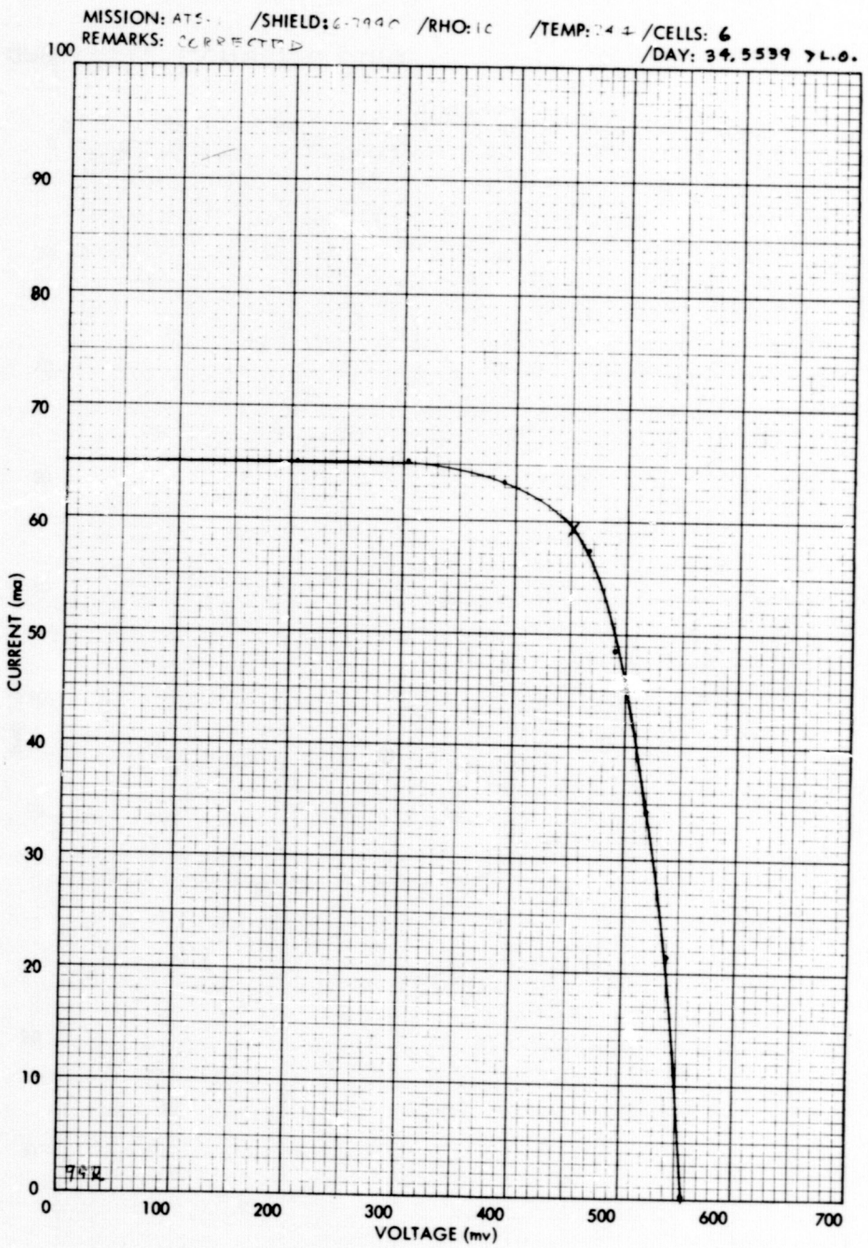


Figure 94. Cell 6, Days 20.3 and 34.5. Corrected Data

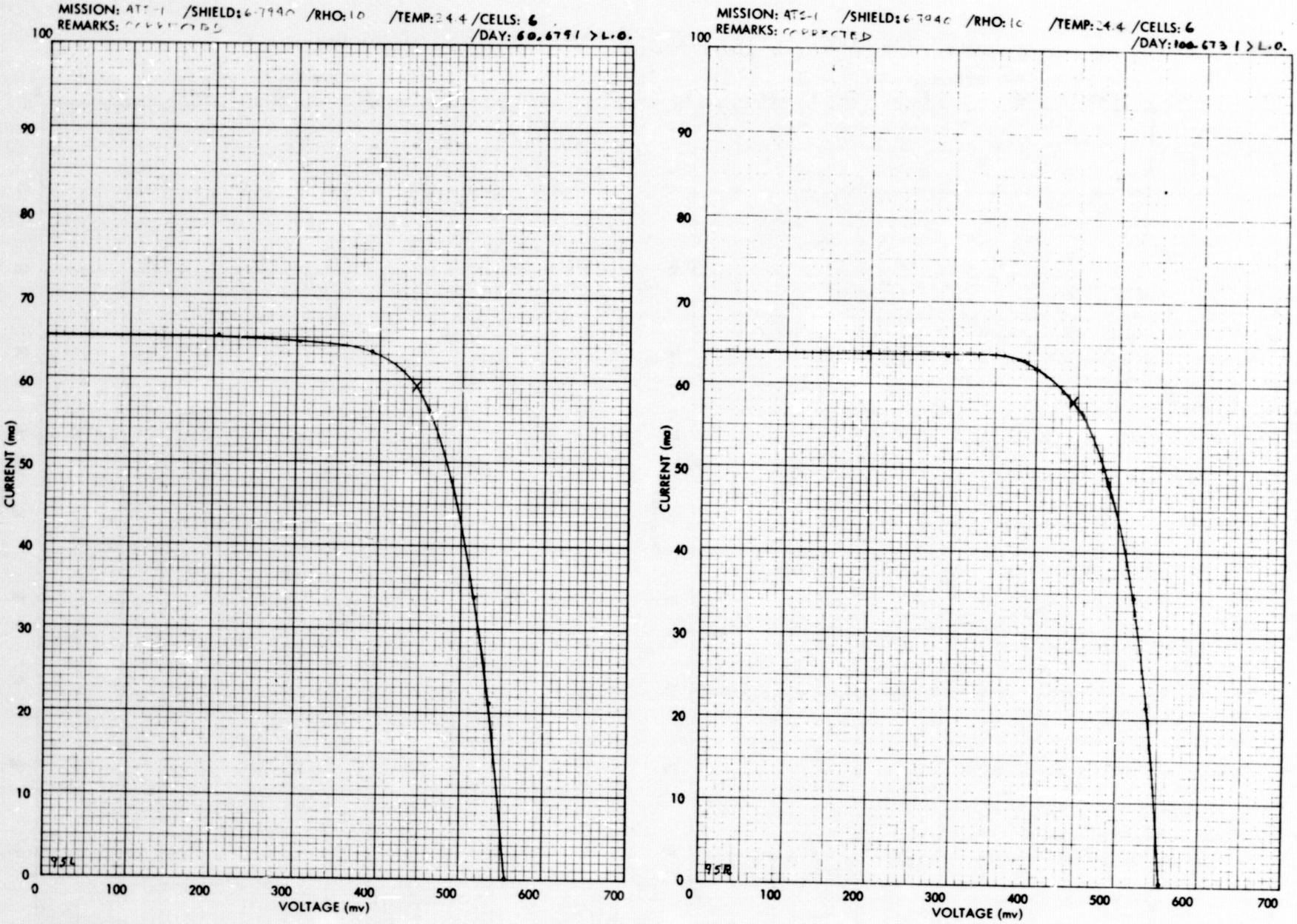
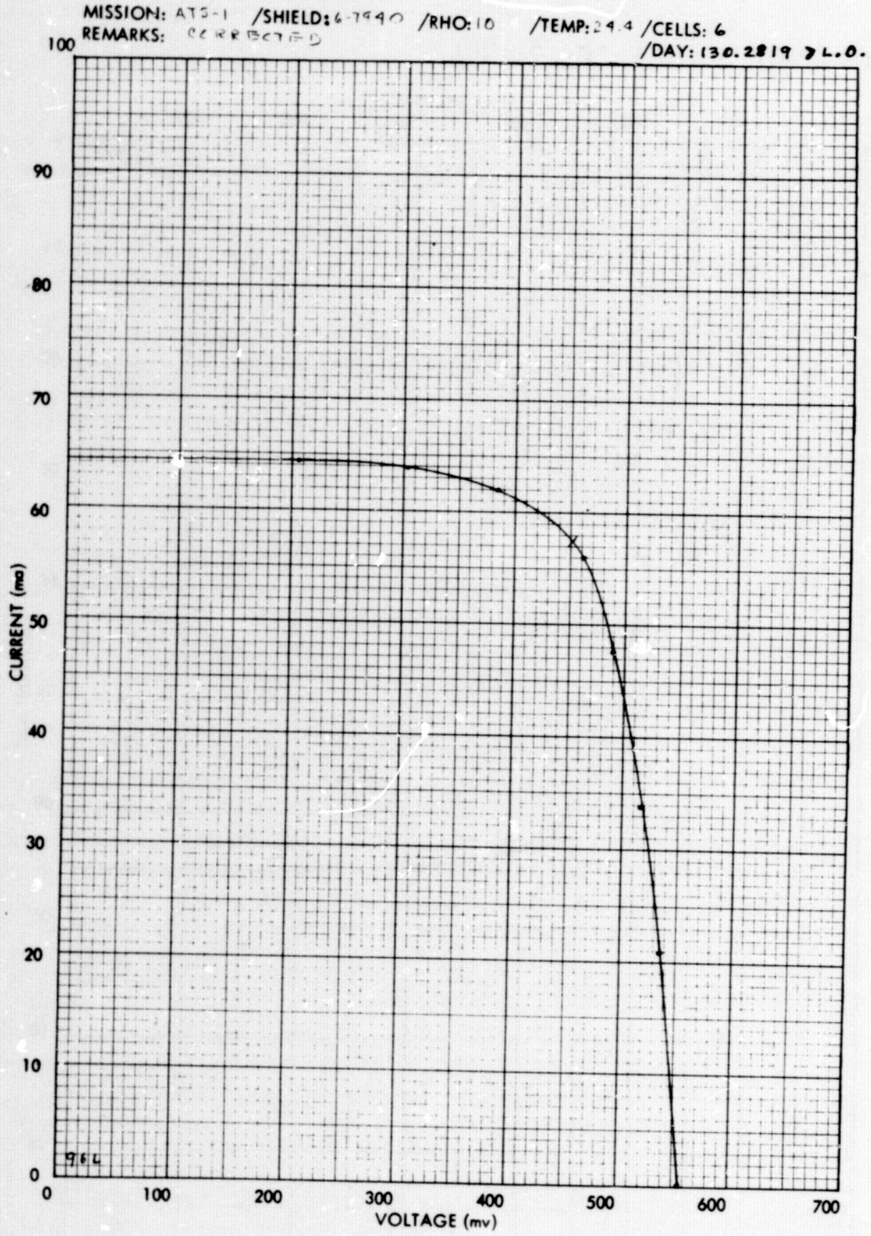


Figure 95. Cell 6, Days 60.6 and 100.6. Corrected Data



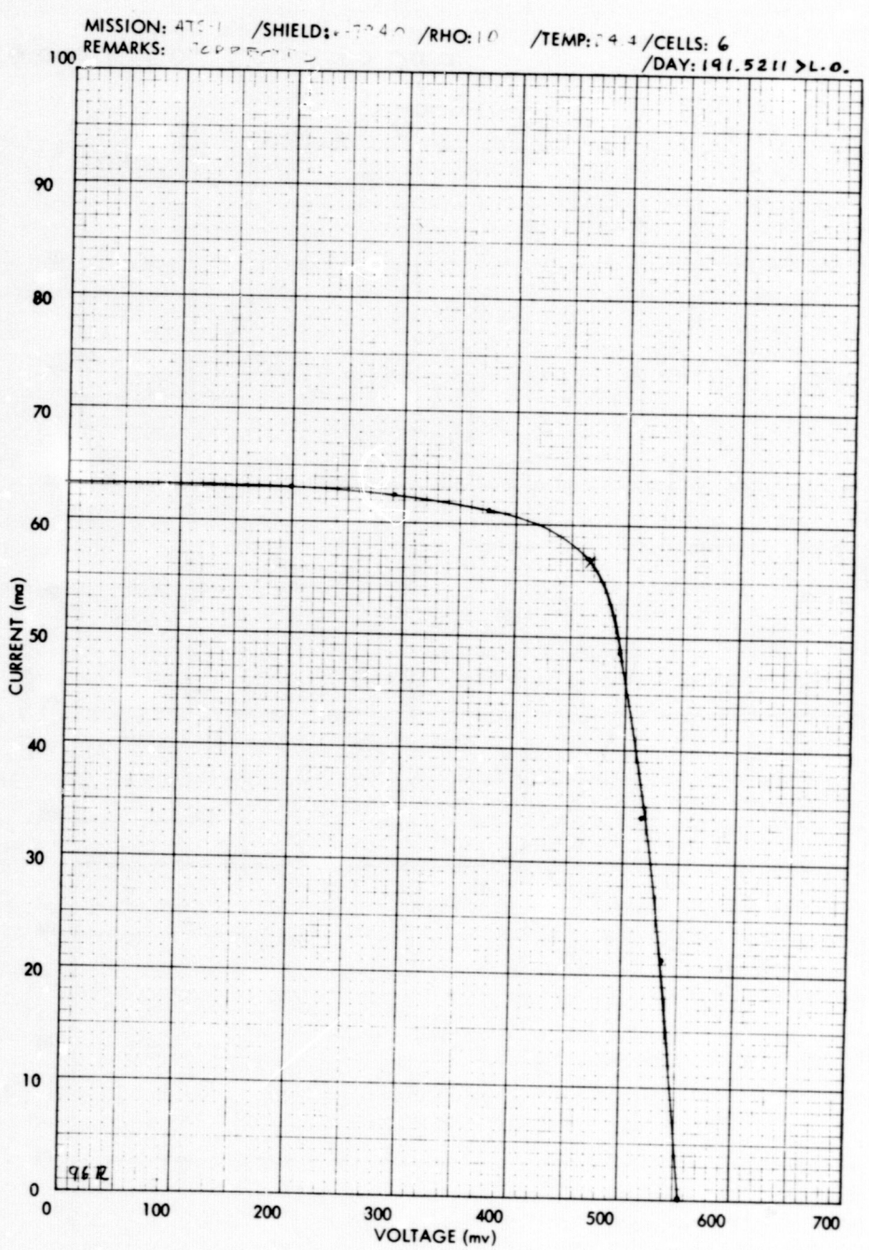
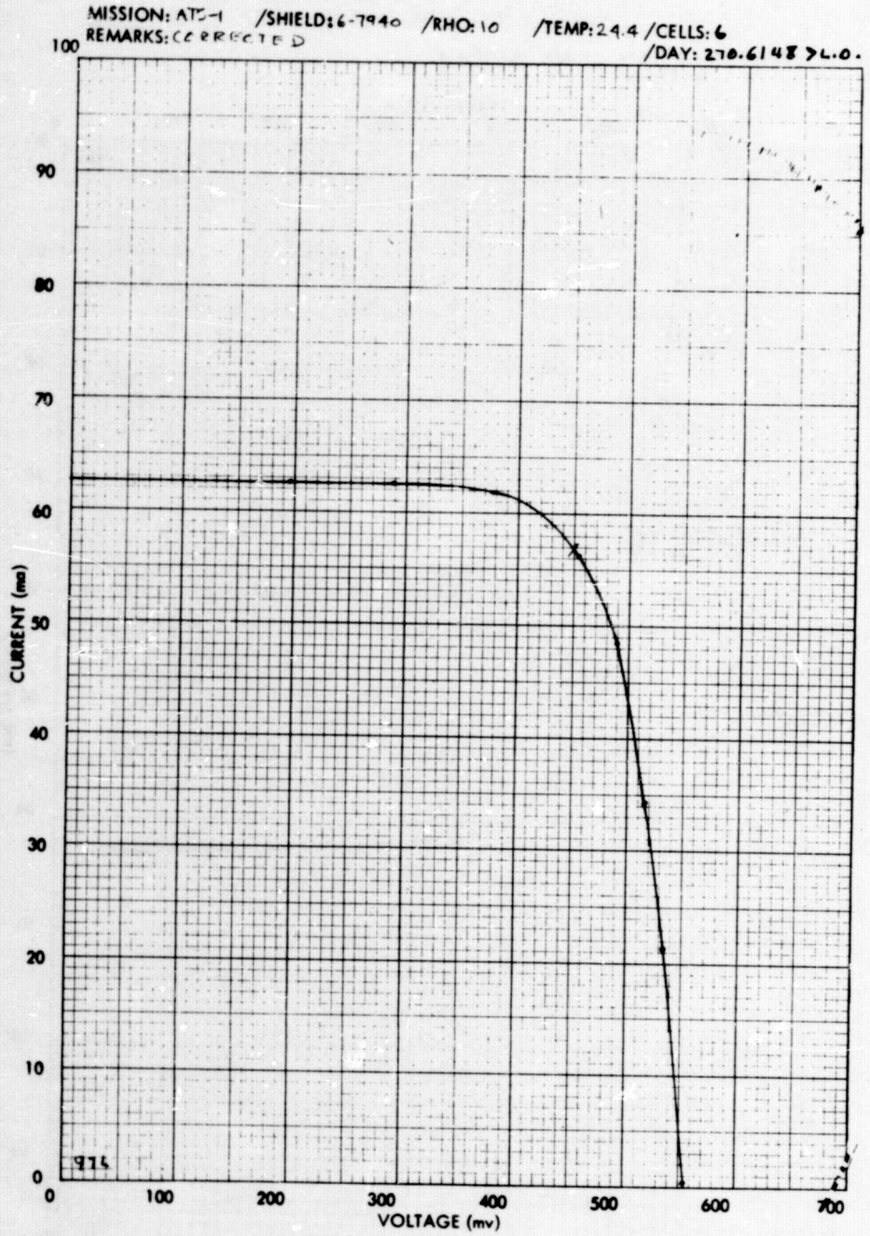


Figure 96. Cell 6, Days 130.2 and 191.5. Corrected Data



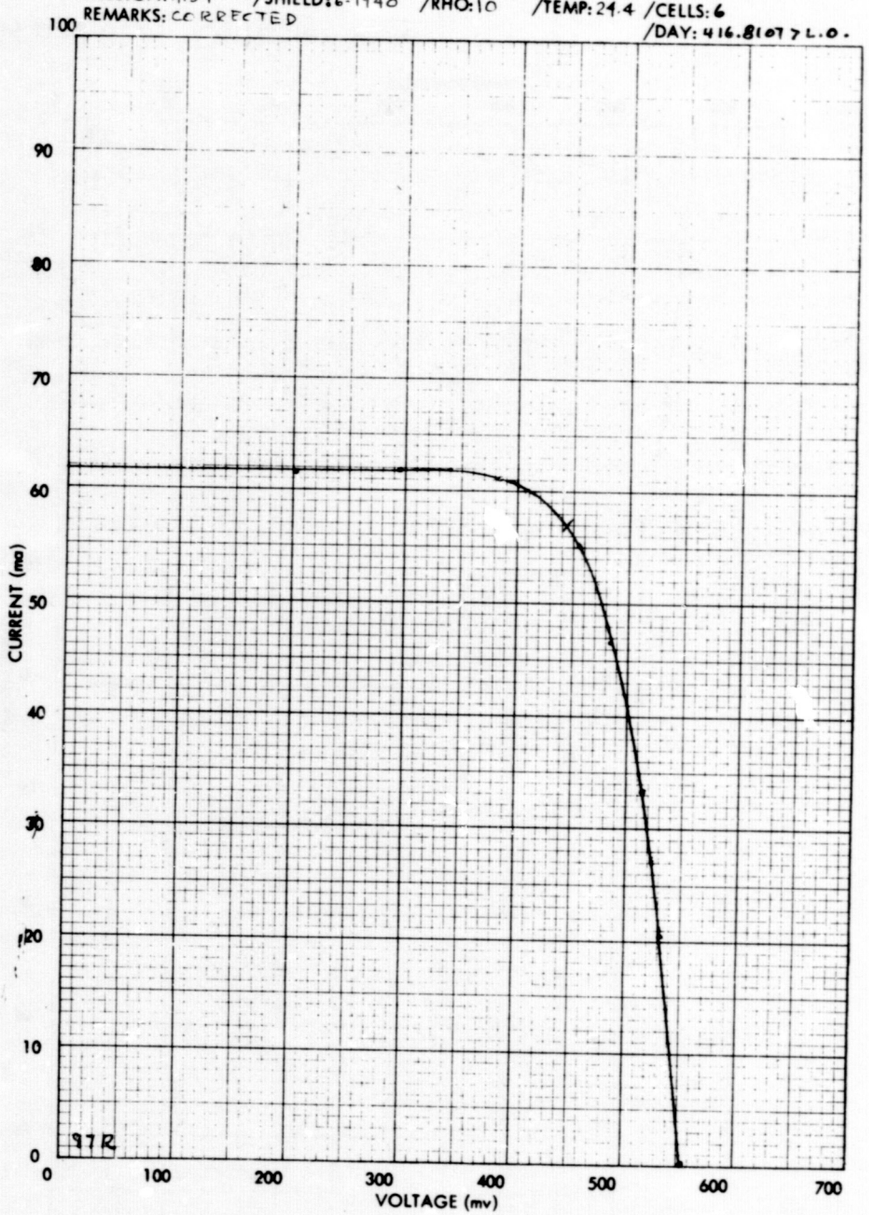
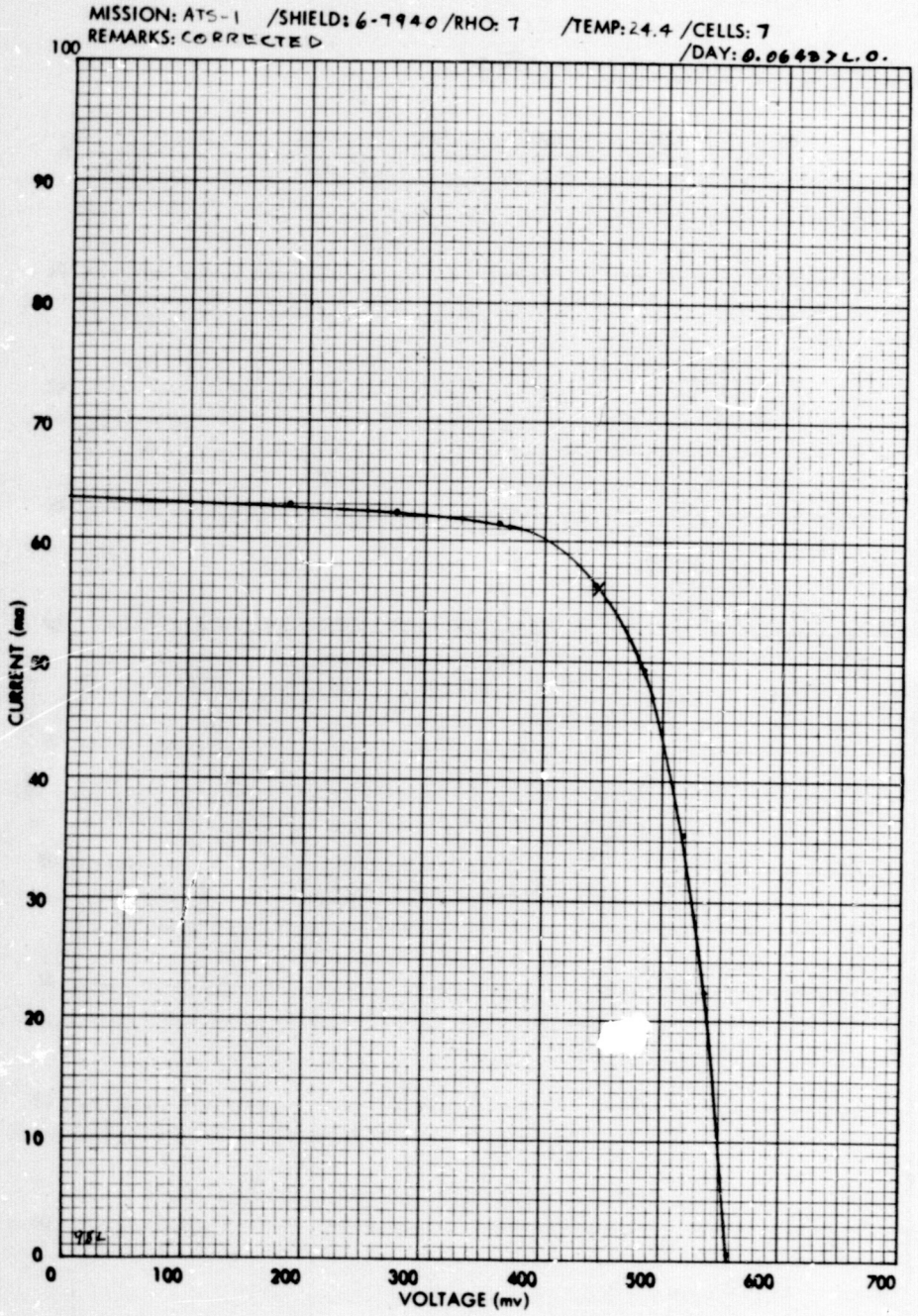


Figure 97. Cell 6, Days 270.4 and 416.8. Corrected Data



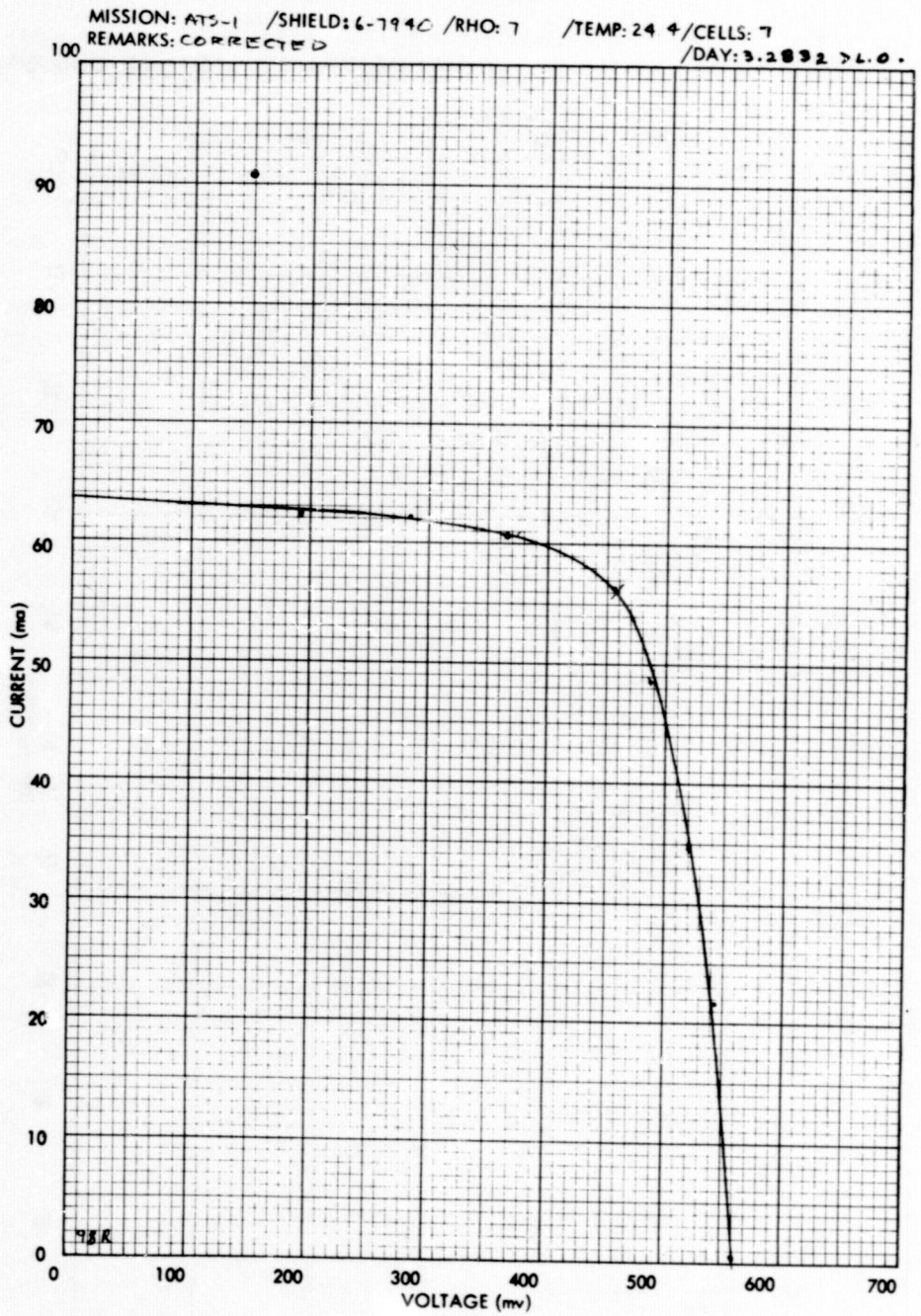
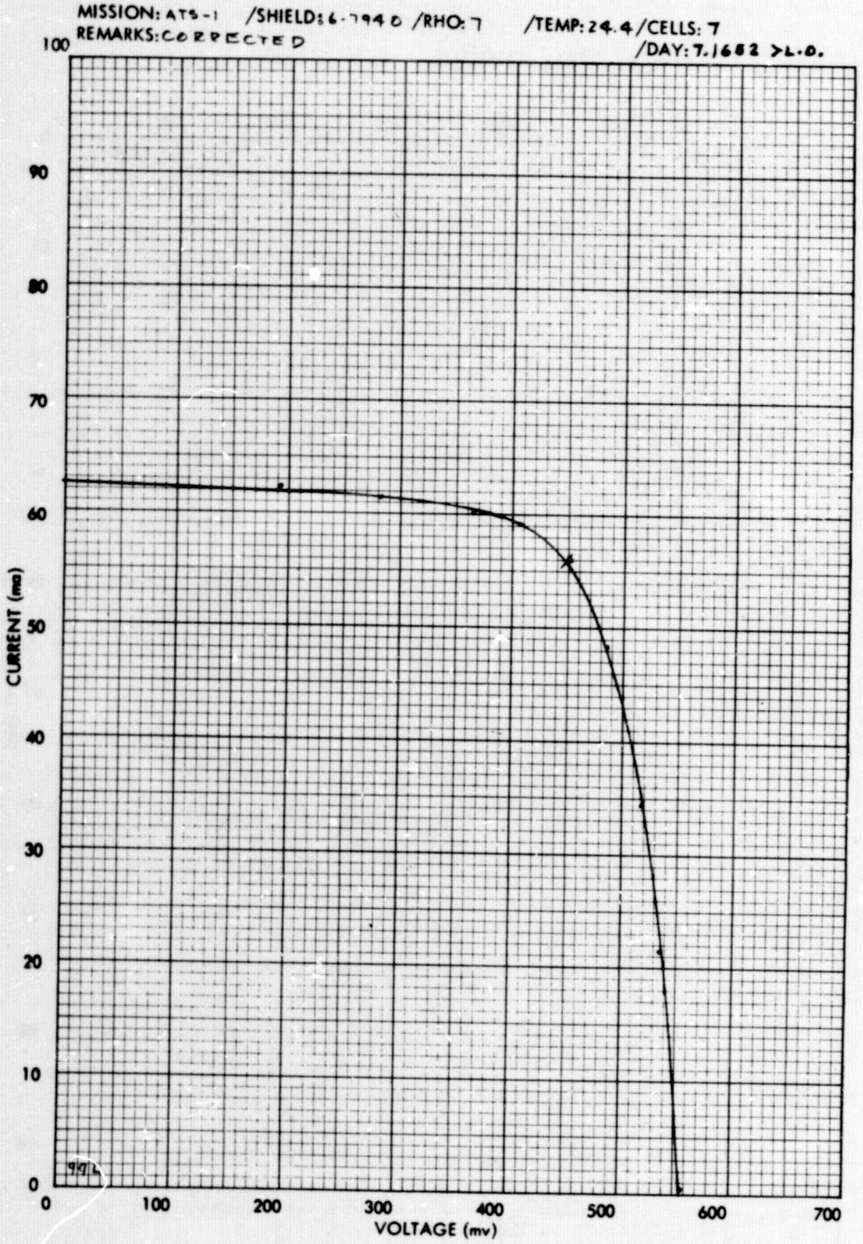
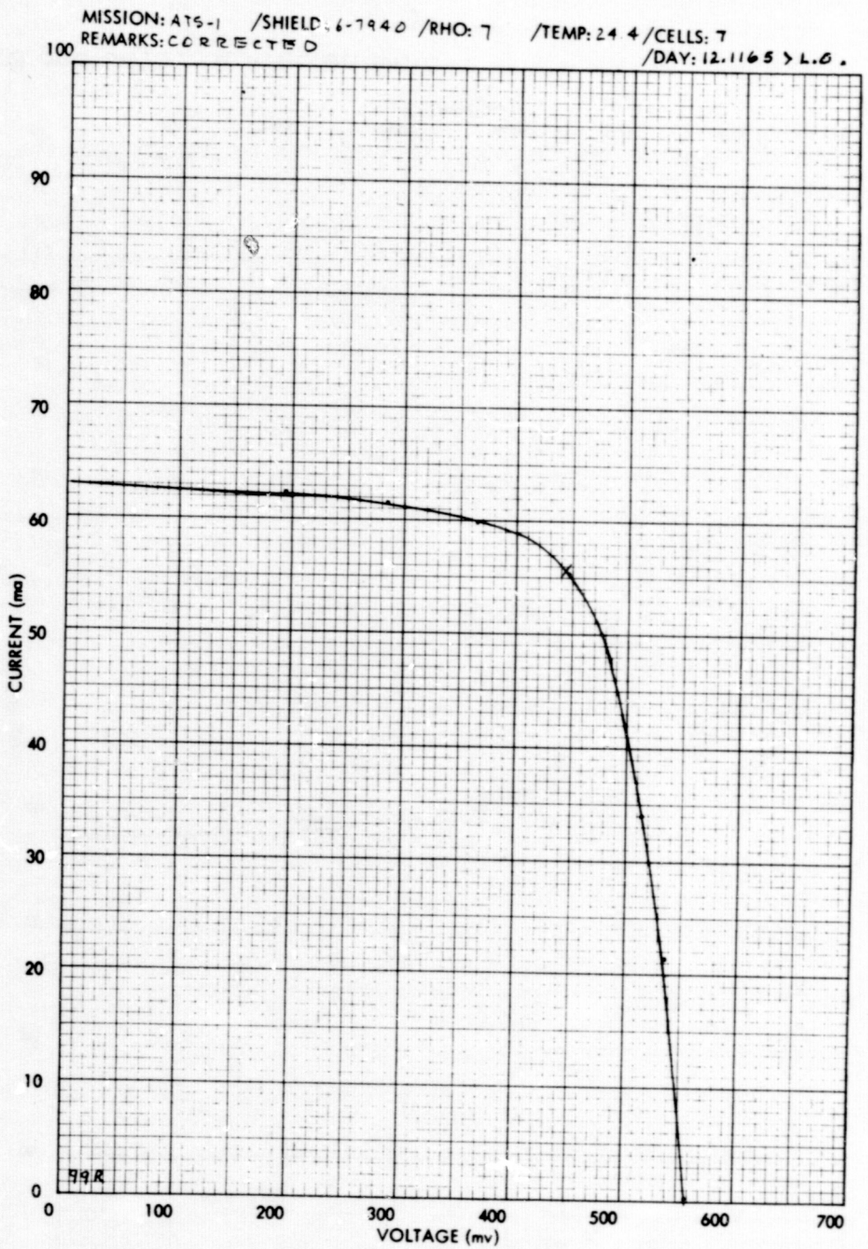


Figure 98. Cell 7, Days 0.064 and 3.2. Corrected Data





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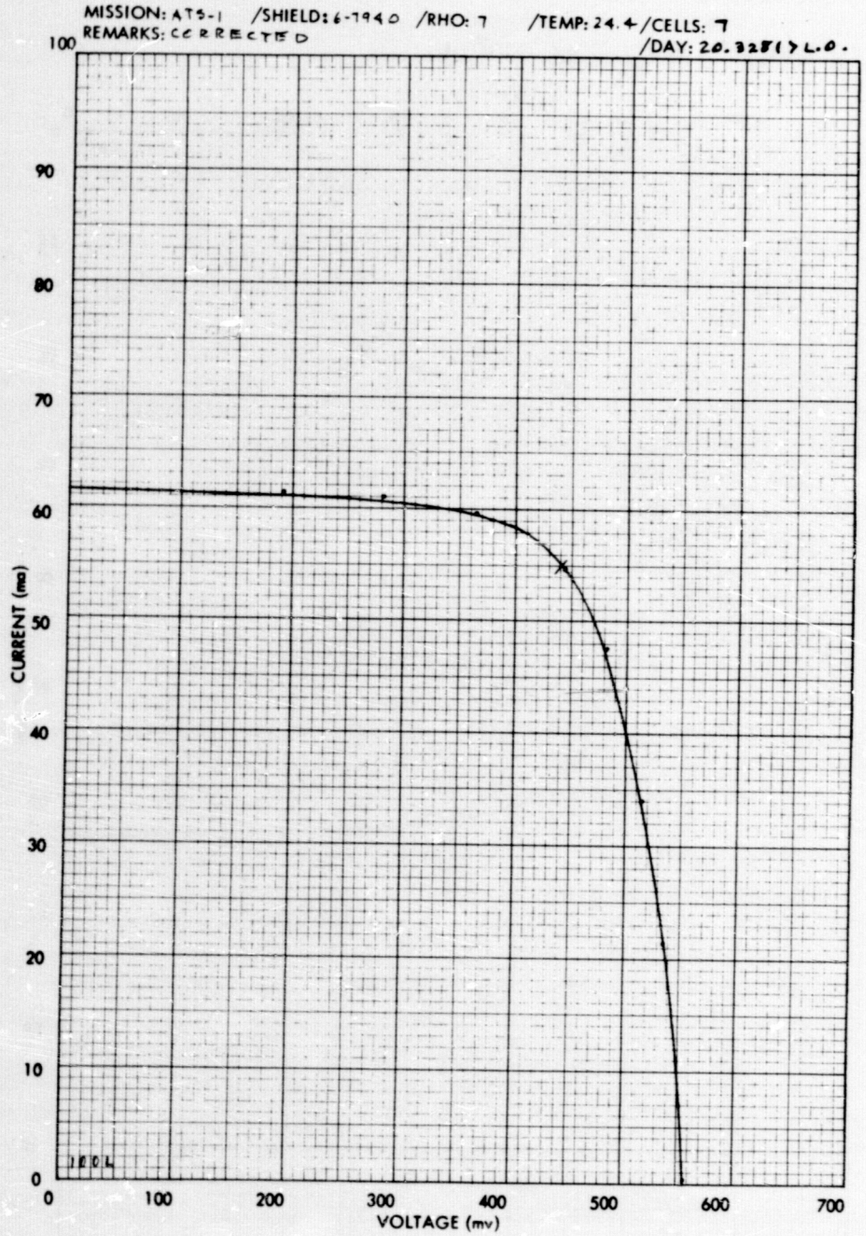


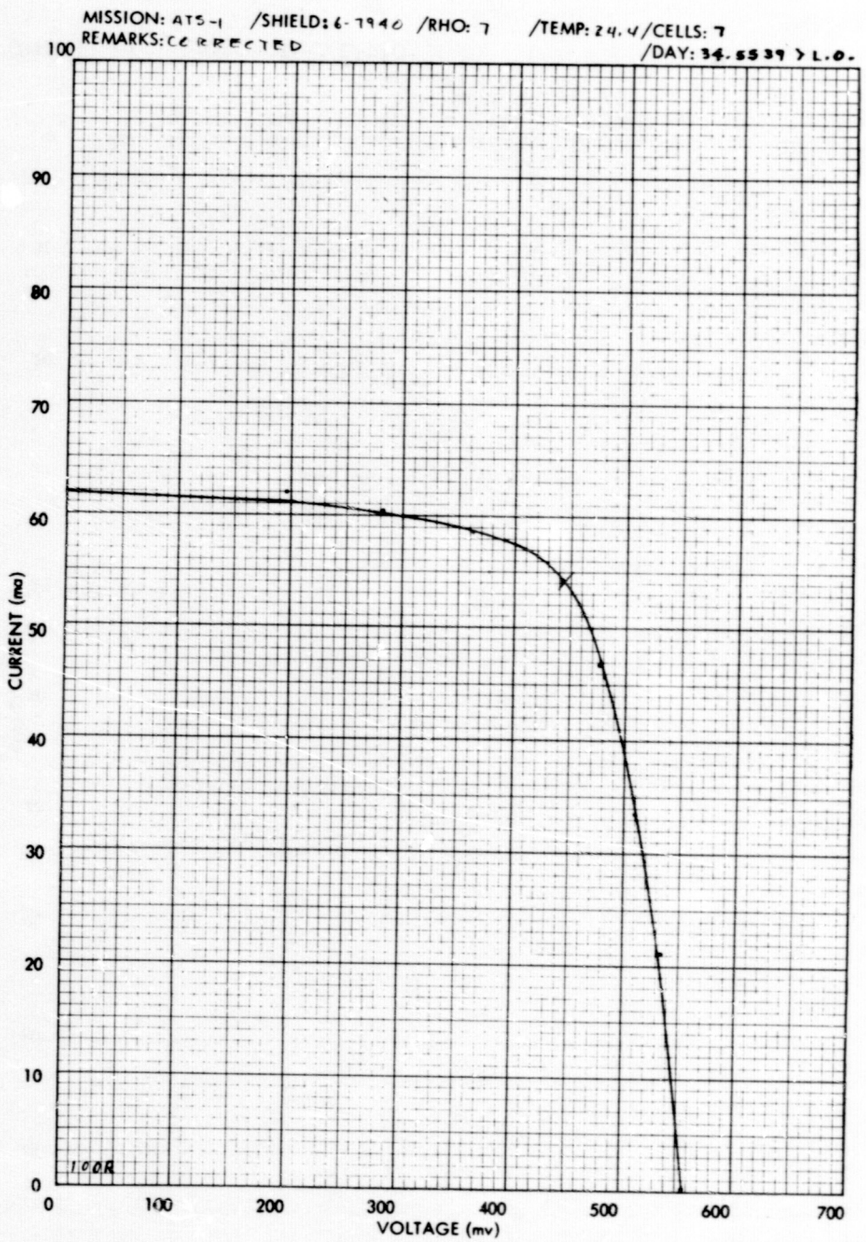


Figure 100. Cell 7, Days 20.3 and 34.5. Corrected Data

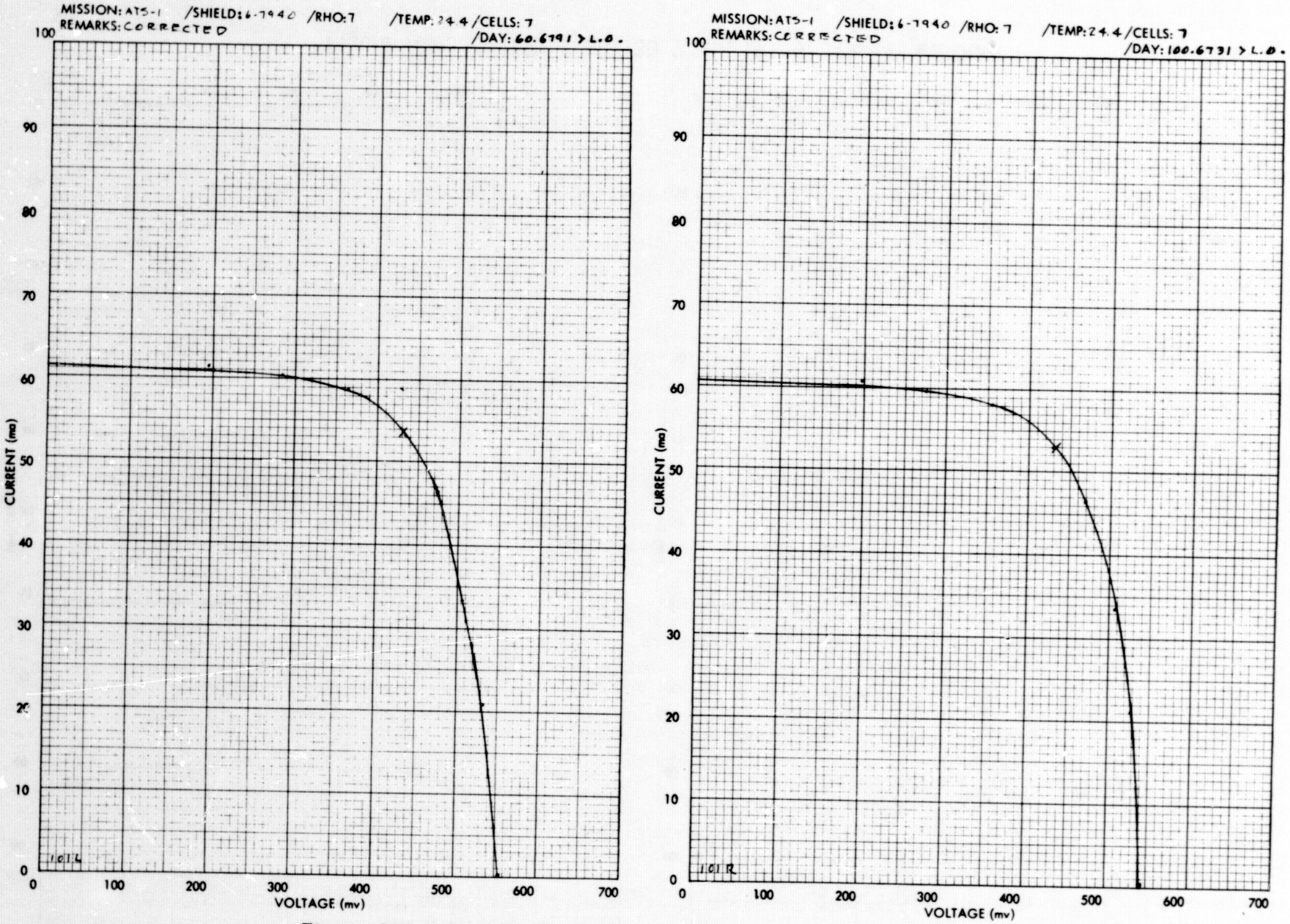
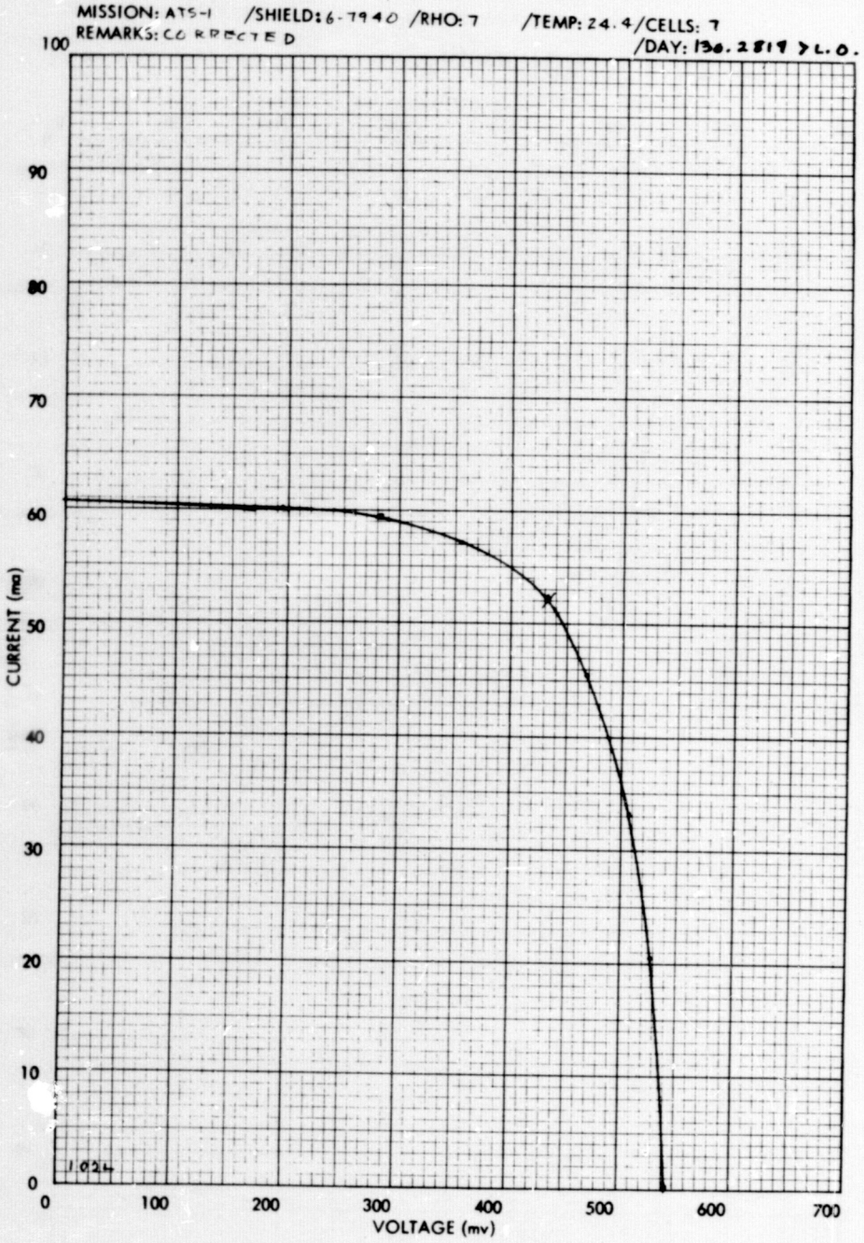


Figure 101. Cell 7, Days 60.6 and 100.6. Corrected Data



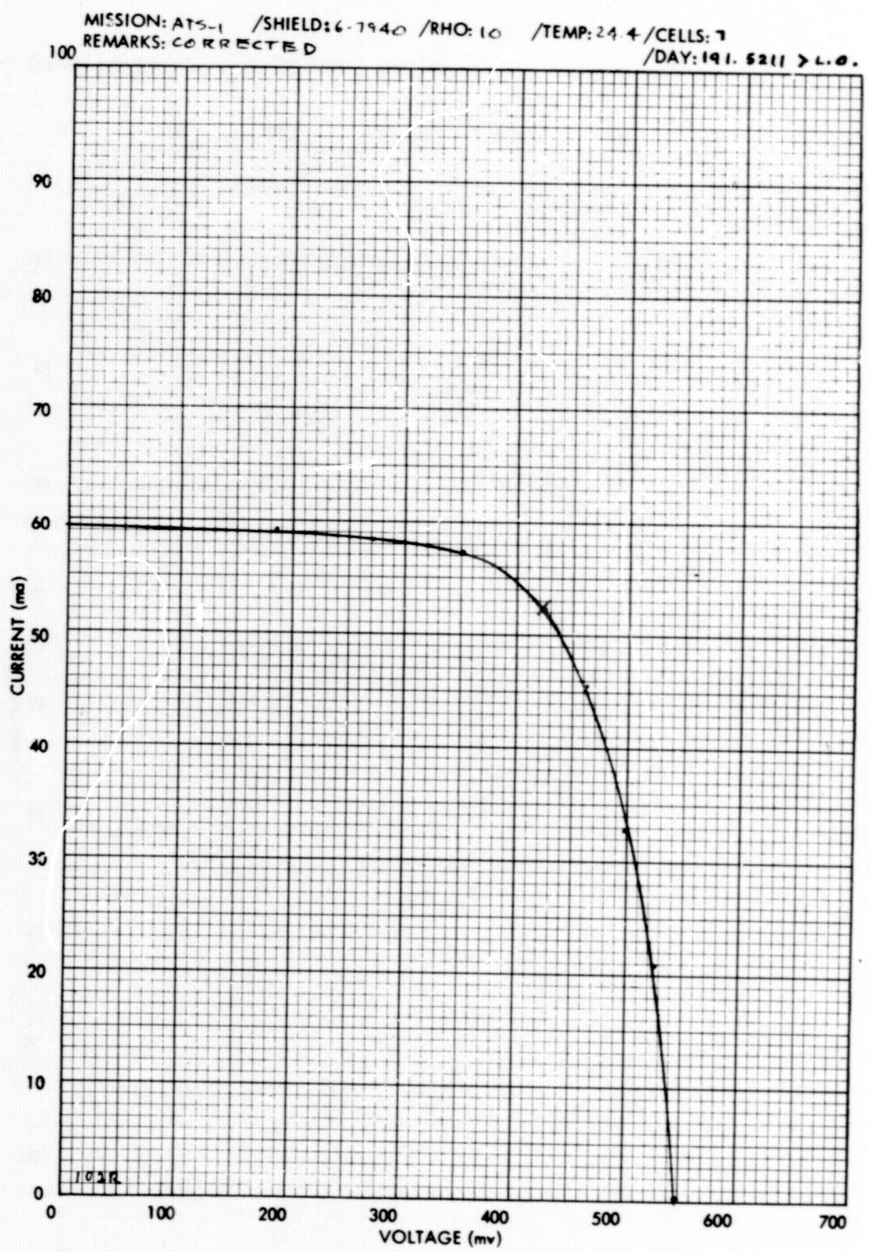


Figure 102. Cell 7, Days 130.2 and 191.5. Corrected Data

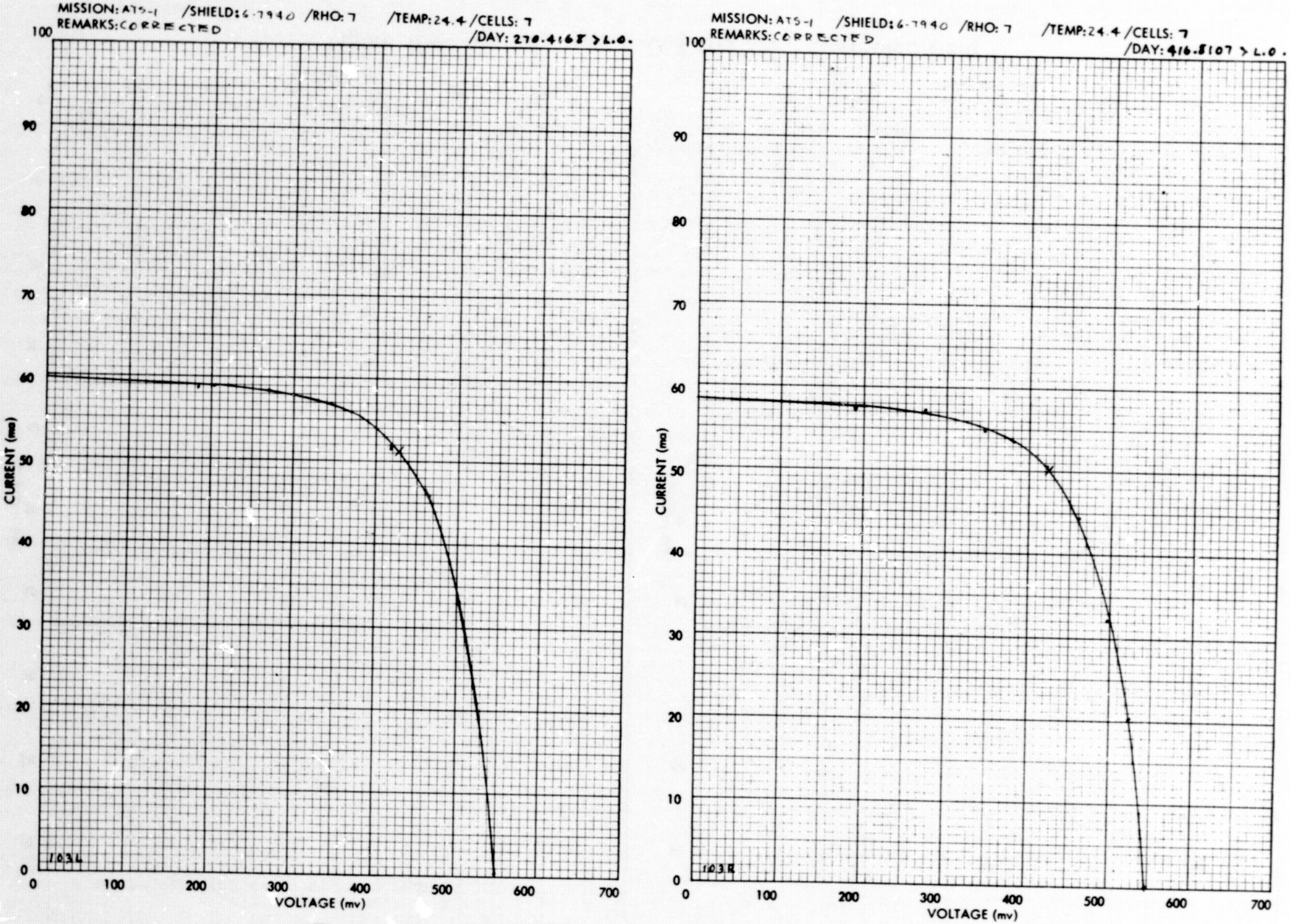


Figure 103. Cell 7, Days 270.4 and 416.8. Corrected Data

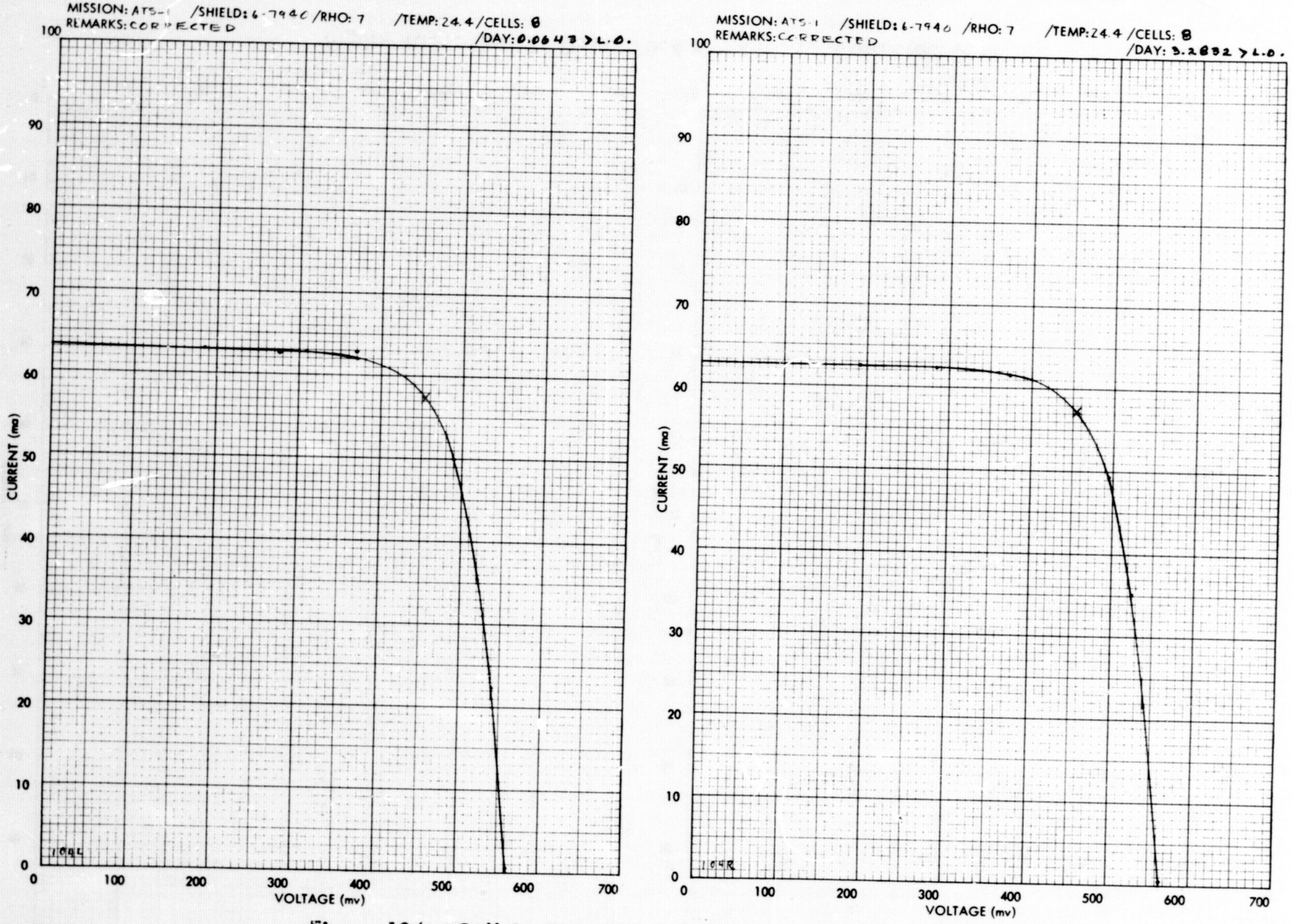
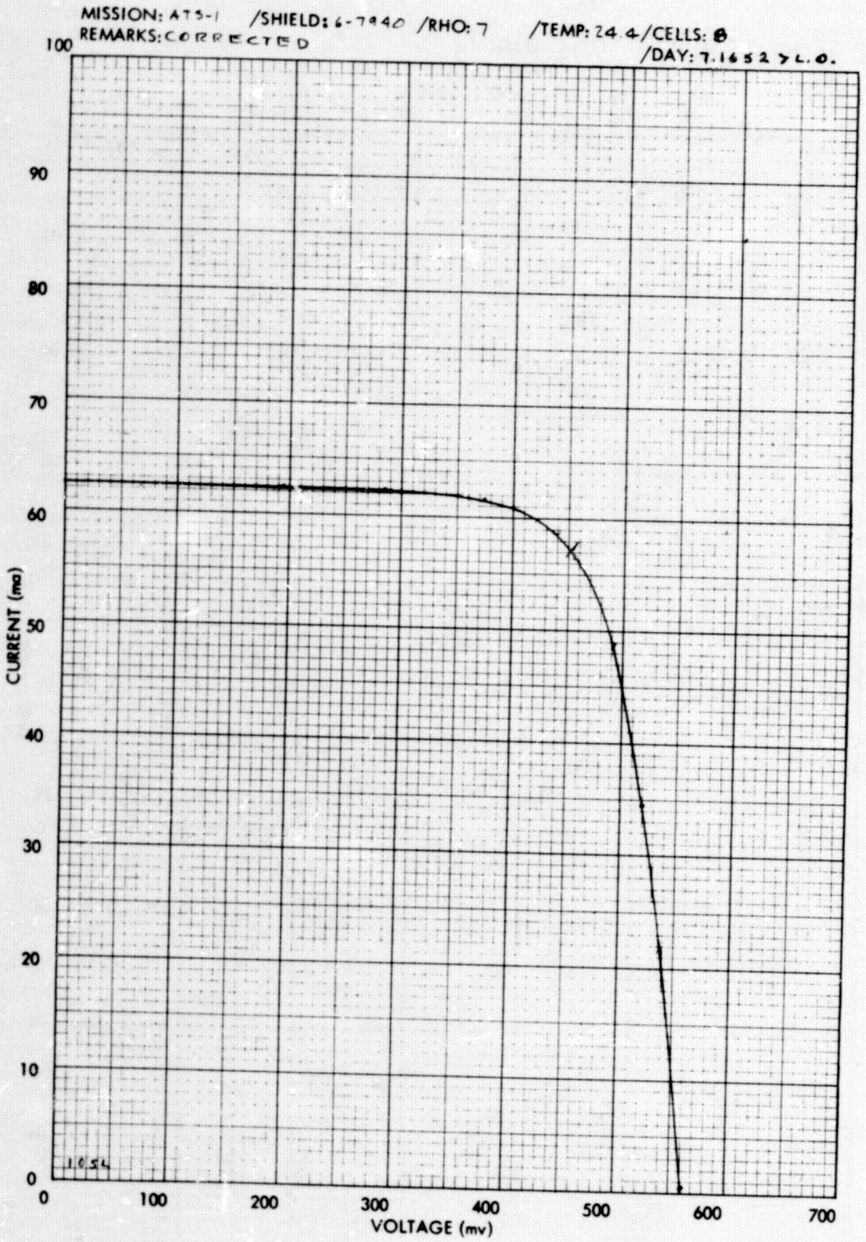


Figure 104. Cell 8, Days 0.064 and 3.2. Corrected Data



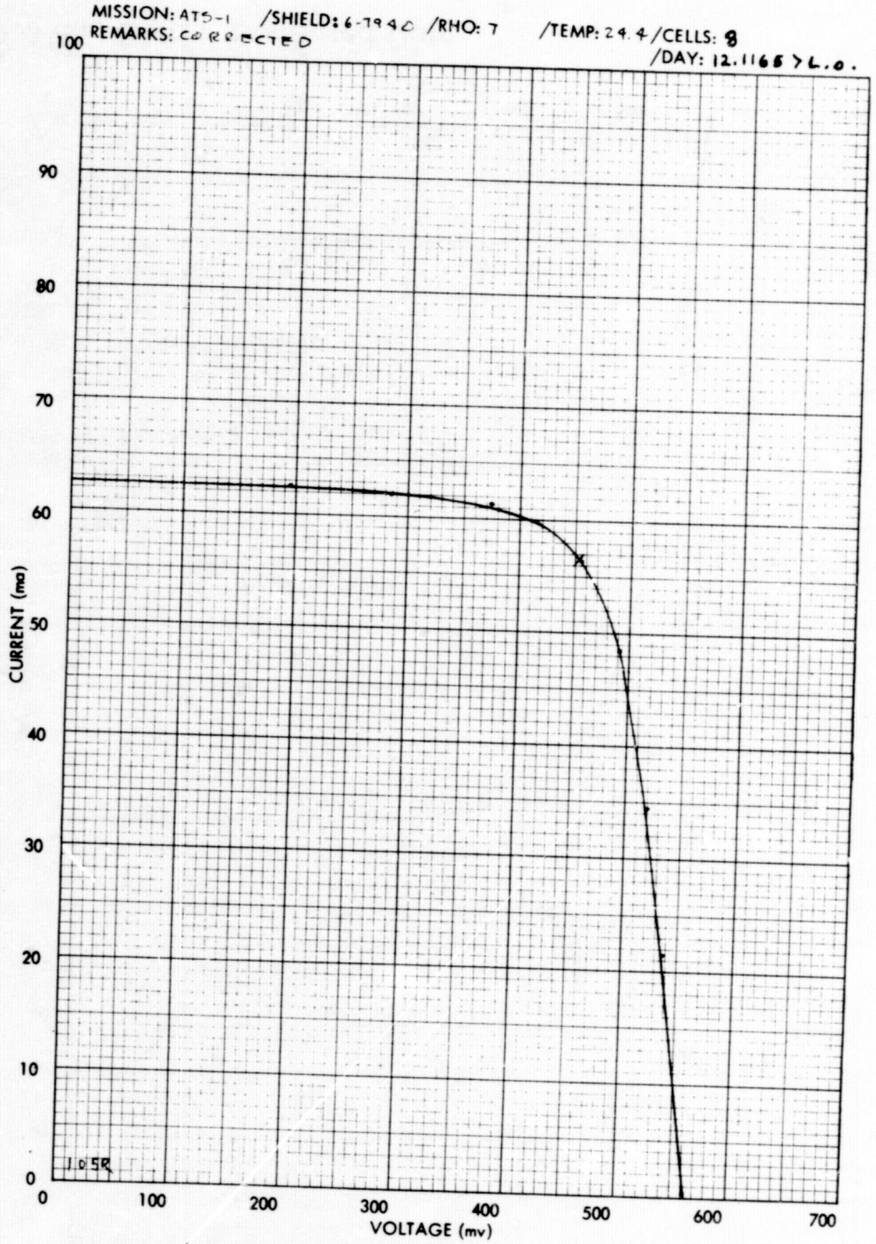
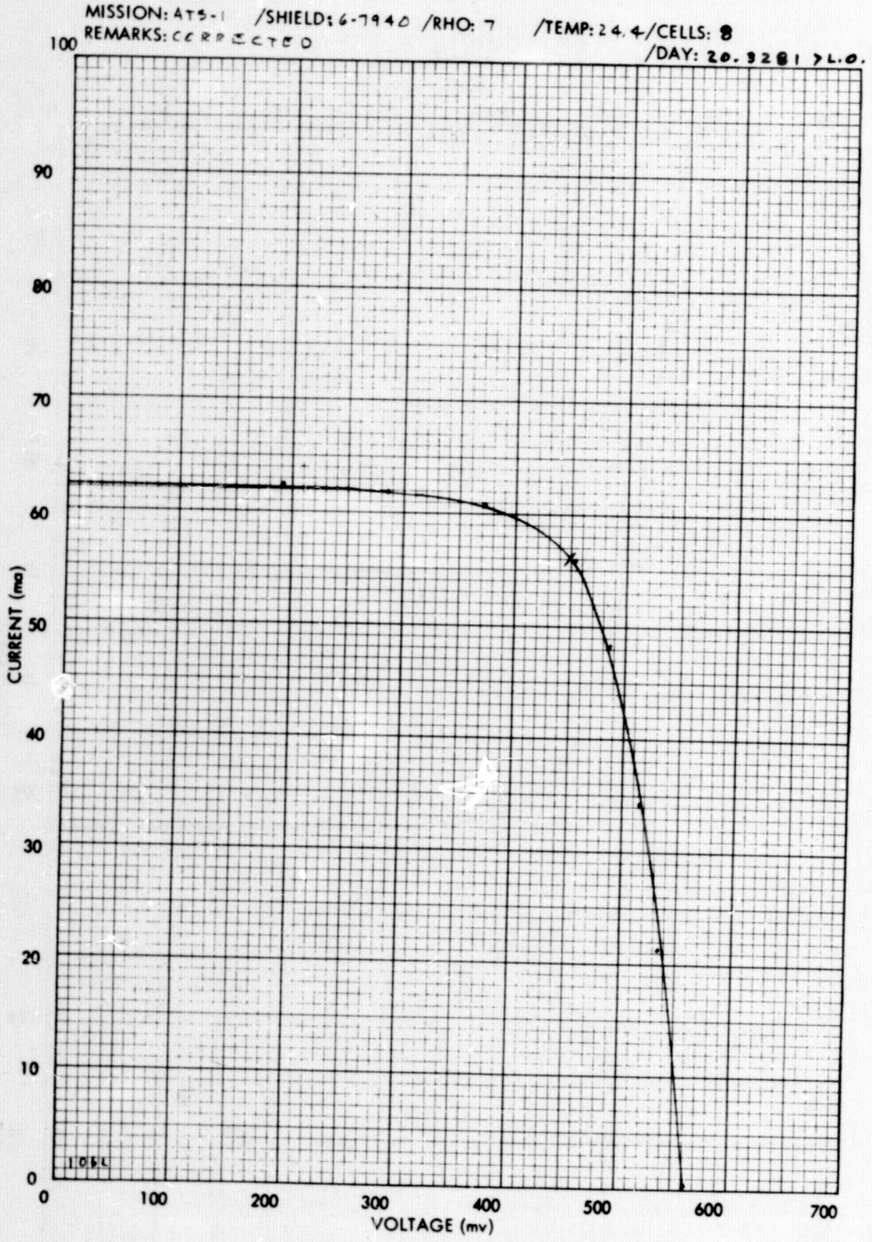


Figure 105. Cell 8, Days 7.1 and 12.1. Corrected Data



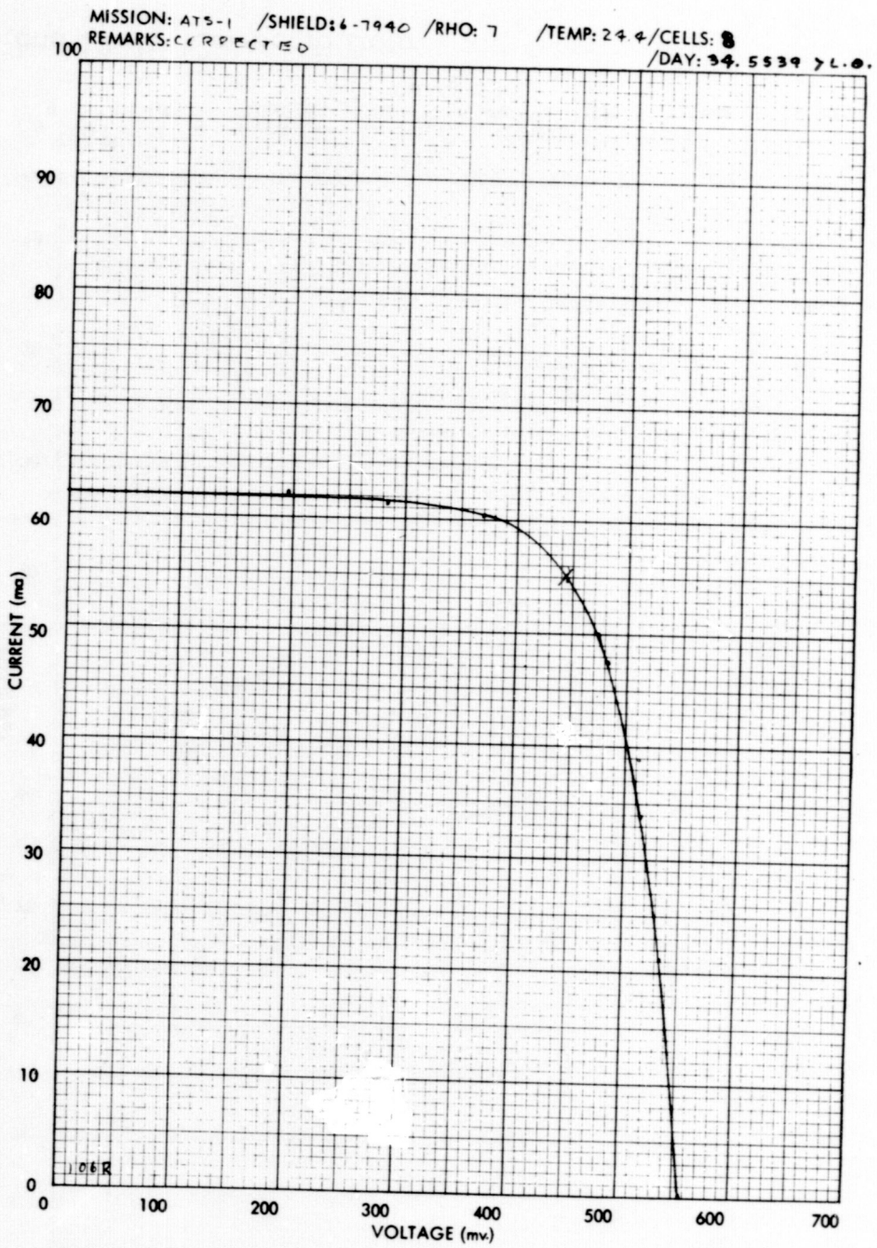


Figure 106. Cell 8, Days 20.3 and 34.5. Corrected Data

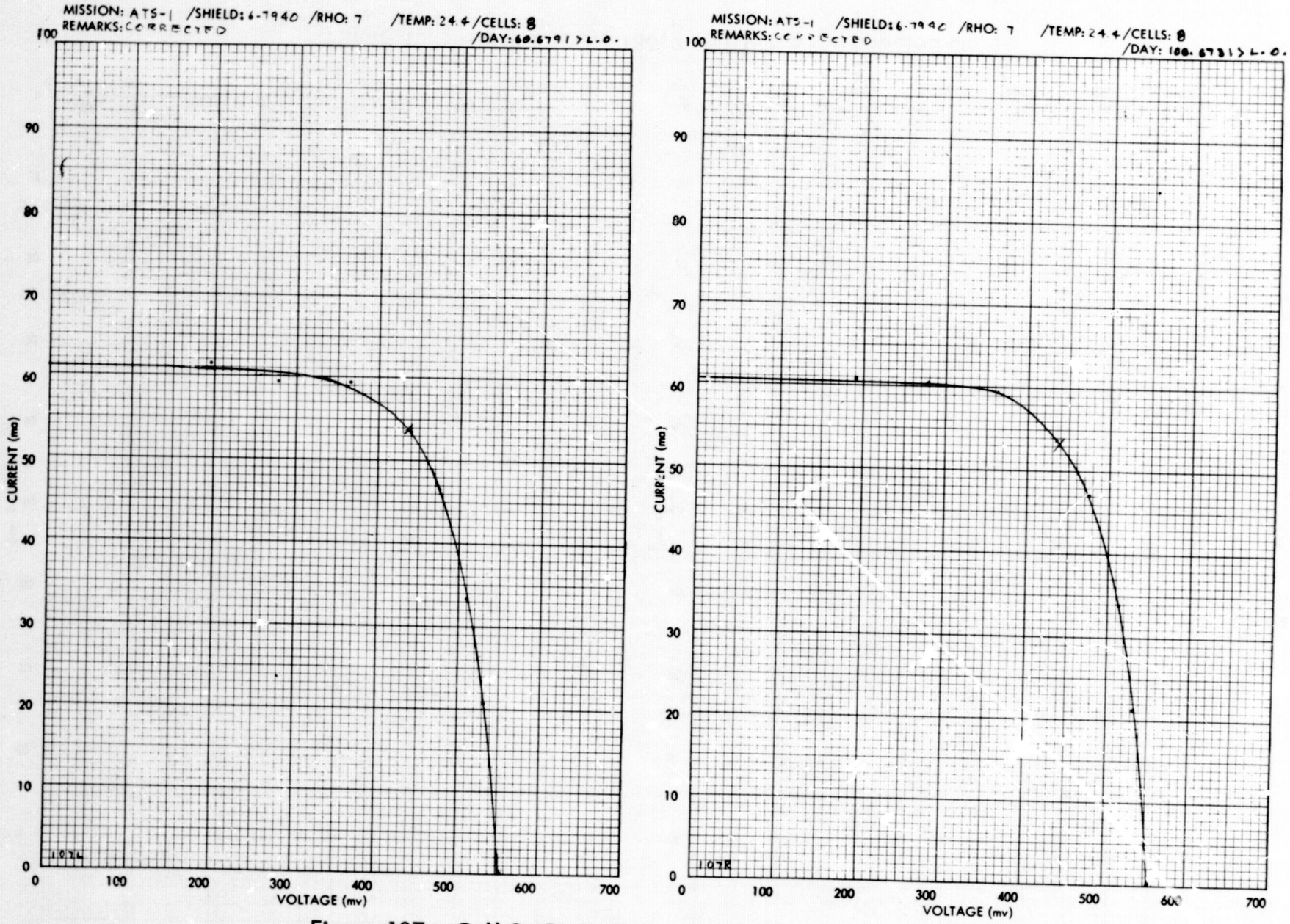
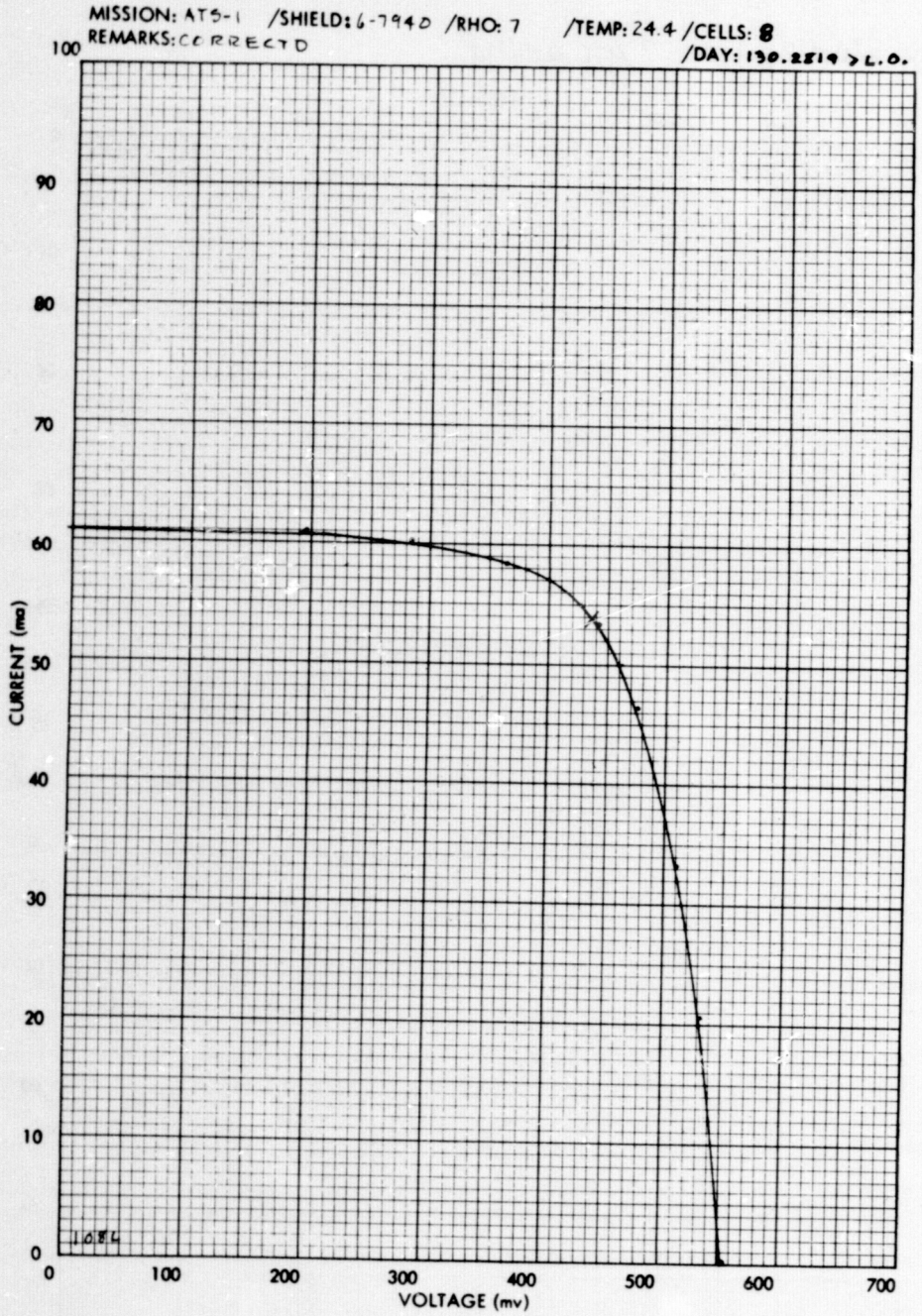
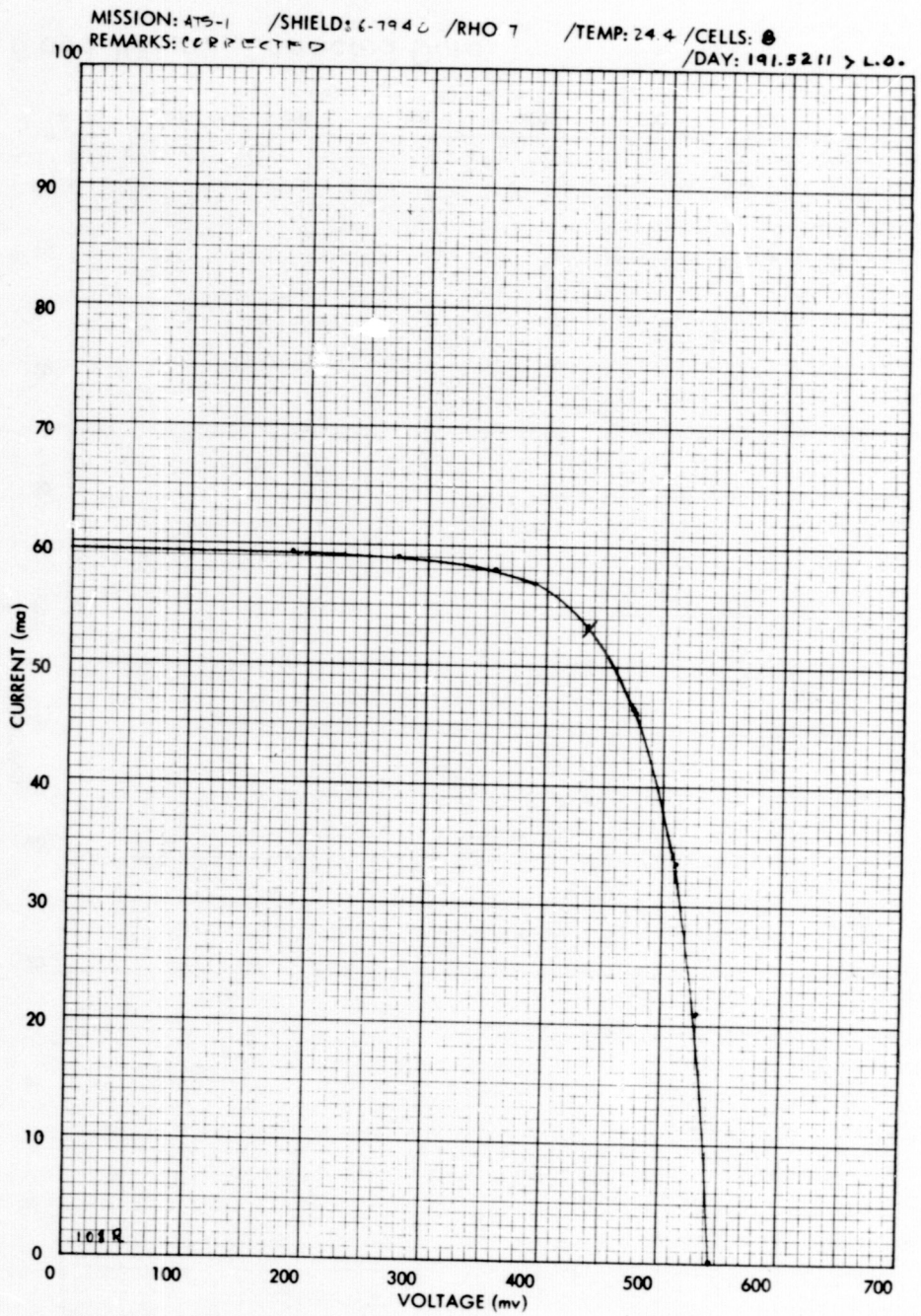


Figure 107. Cell 8, Days 60.6 and 100.6. Corrected Data





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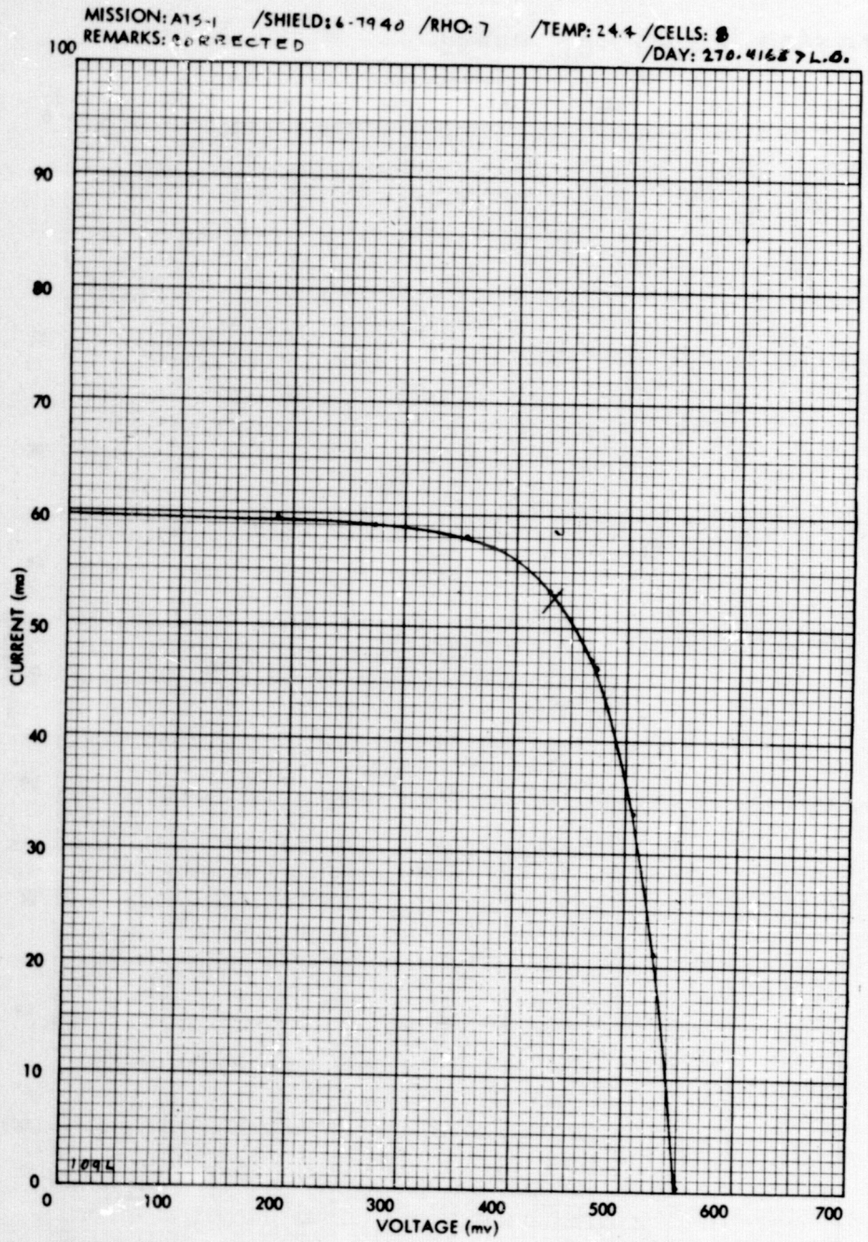


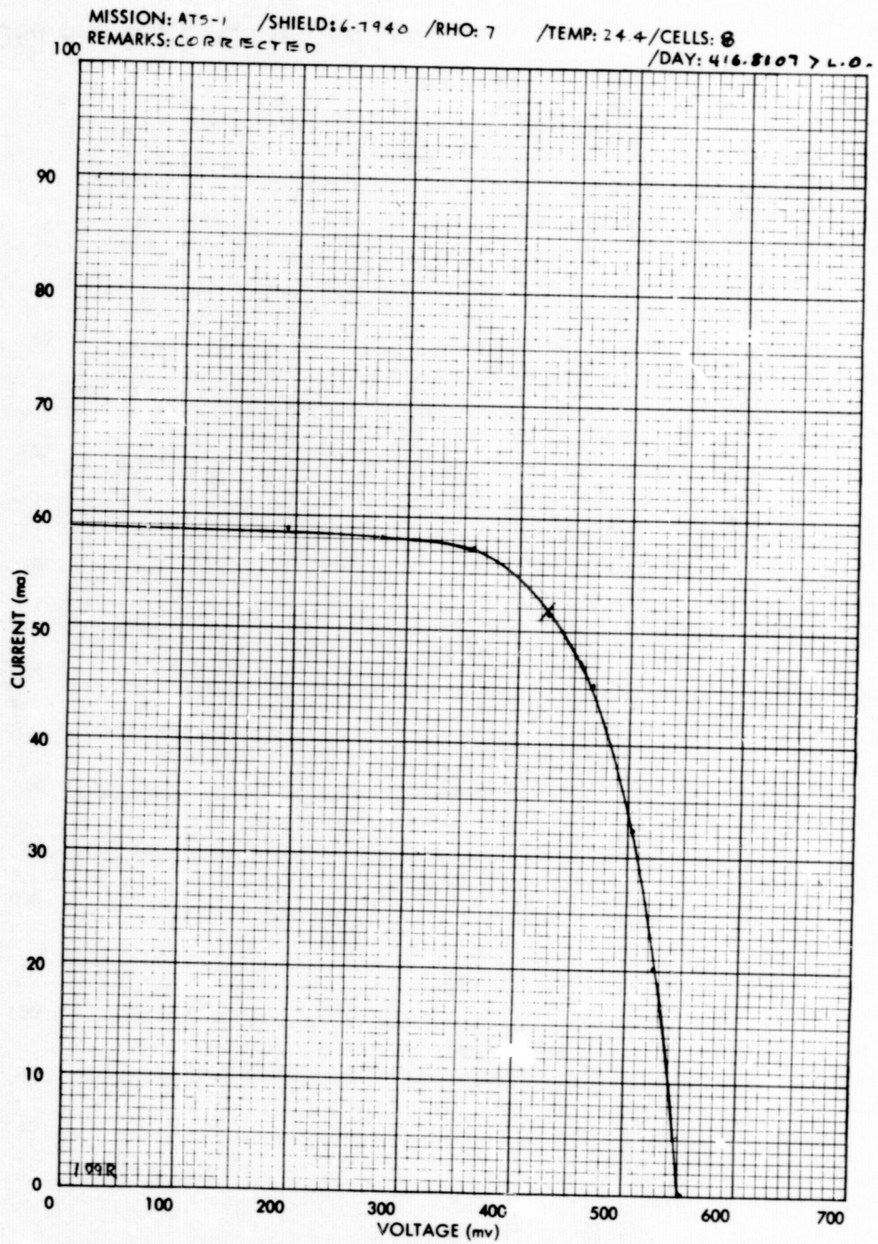
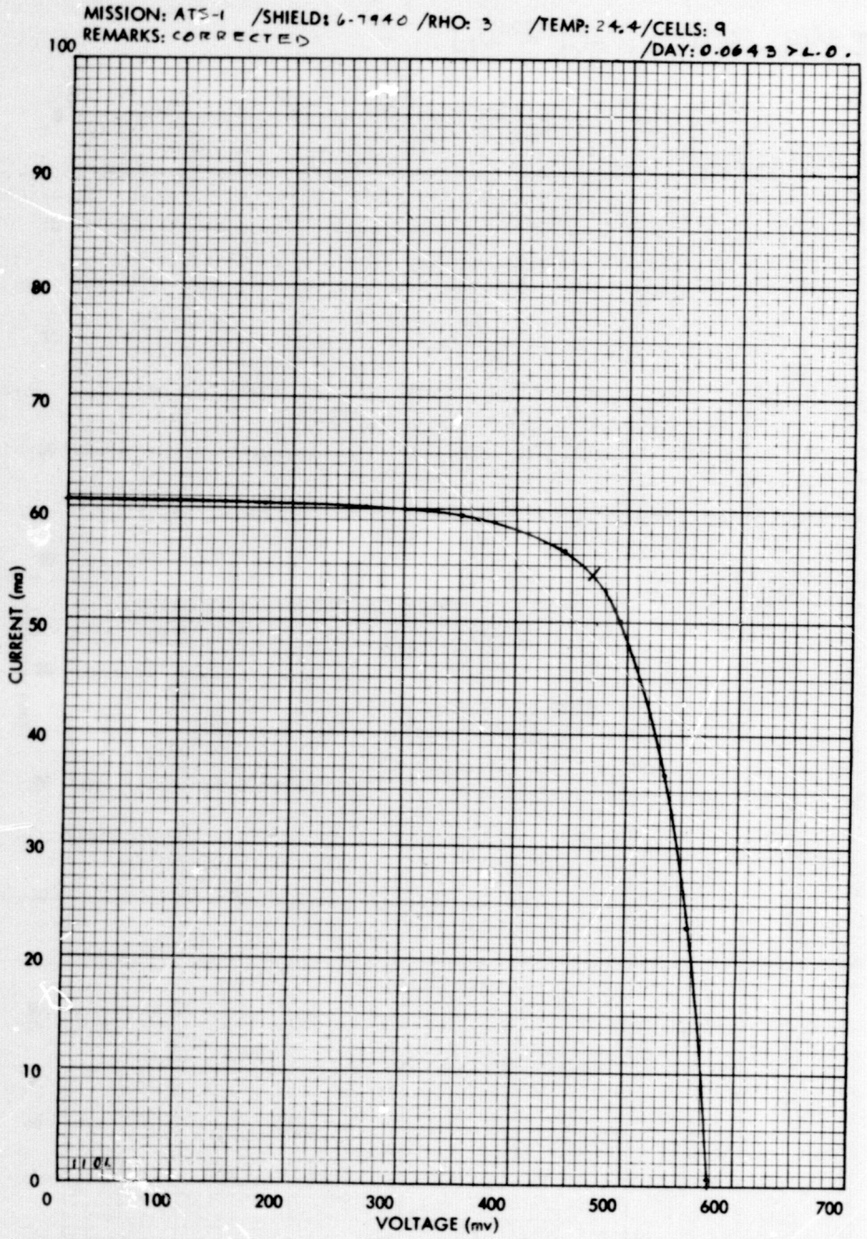


Figure 109. Cell 8, Days 270.4 and 416.8. Corrected Data



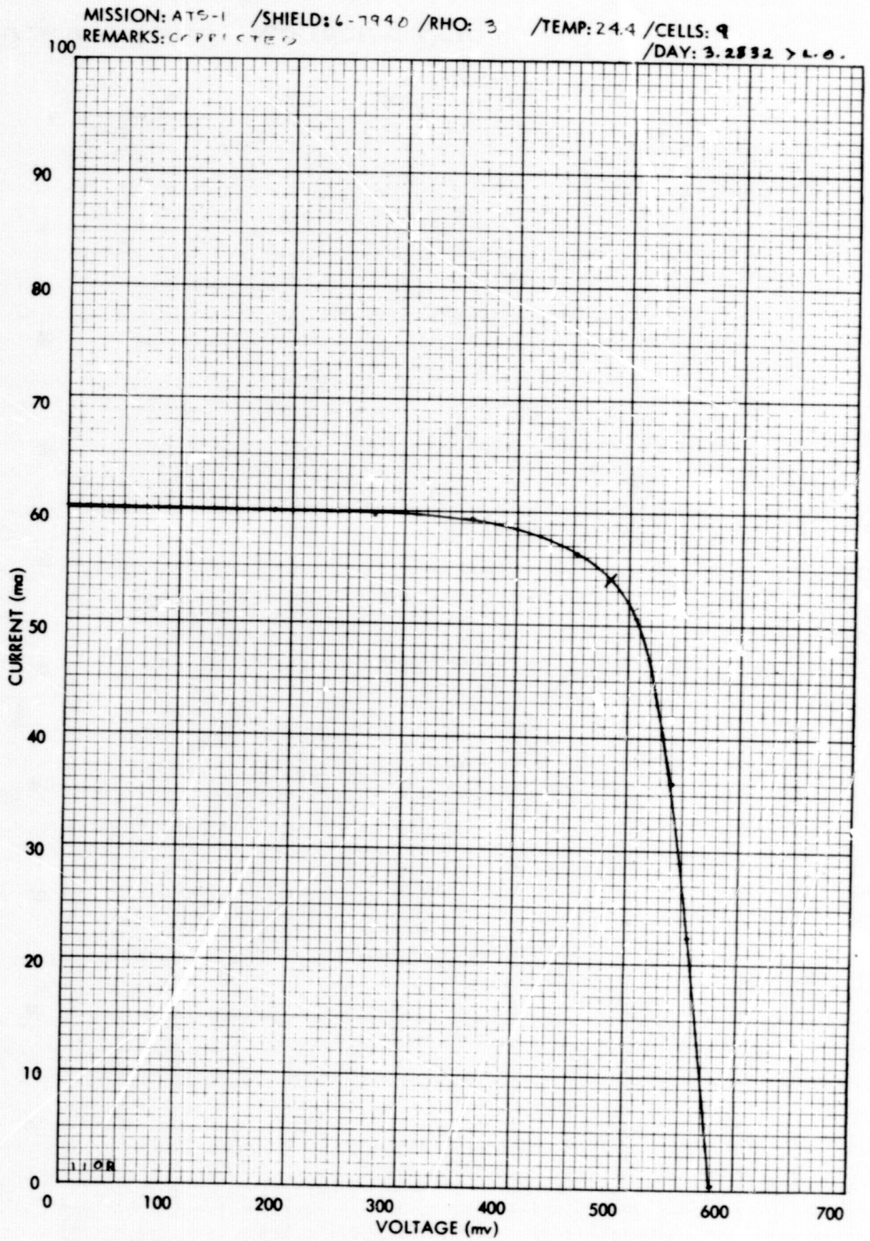
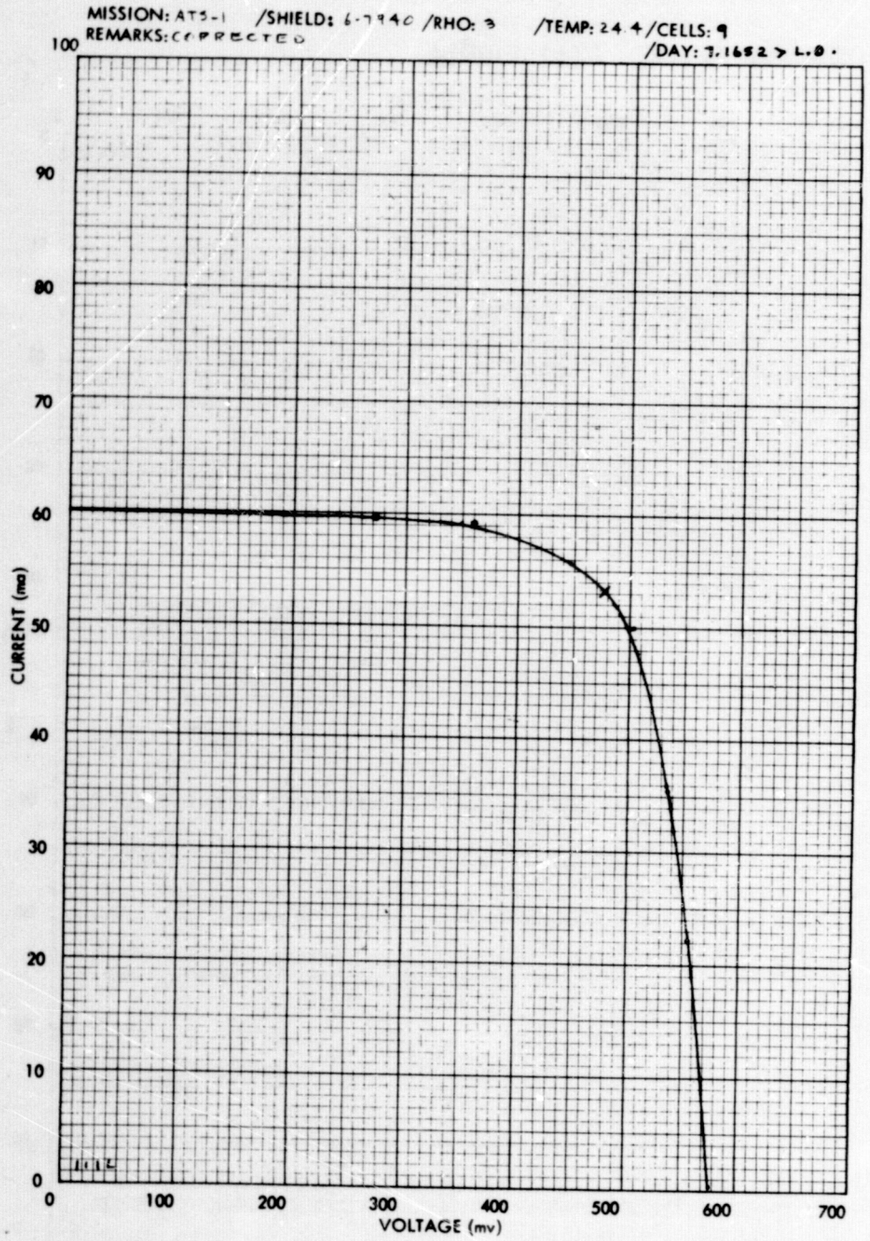
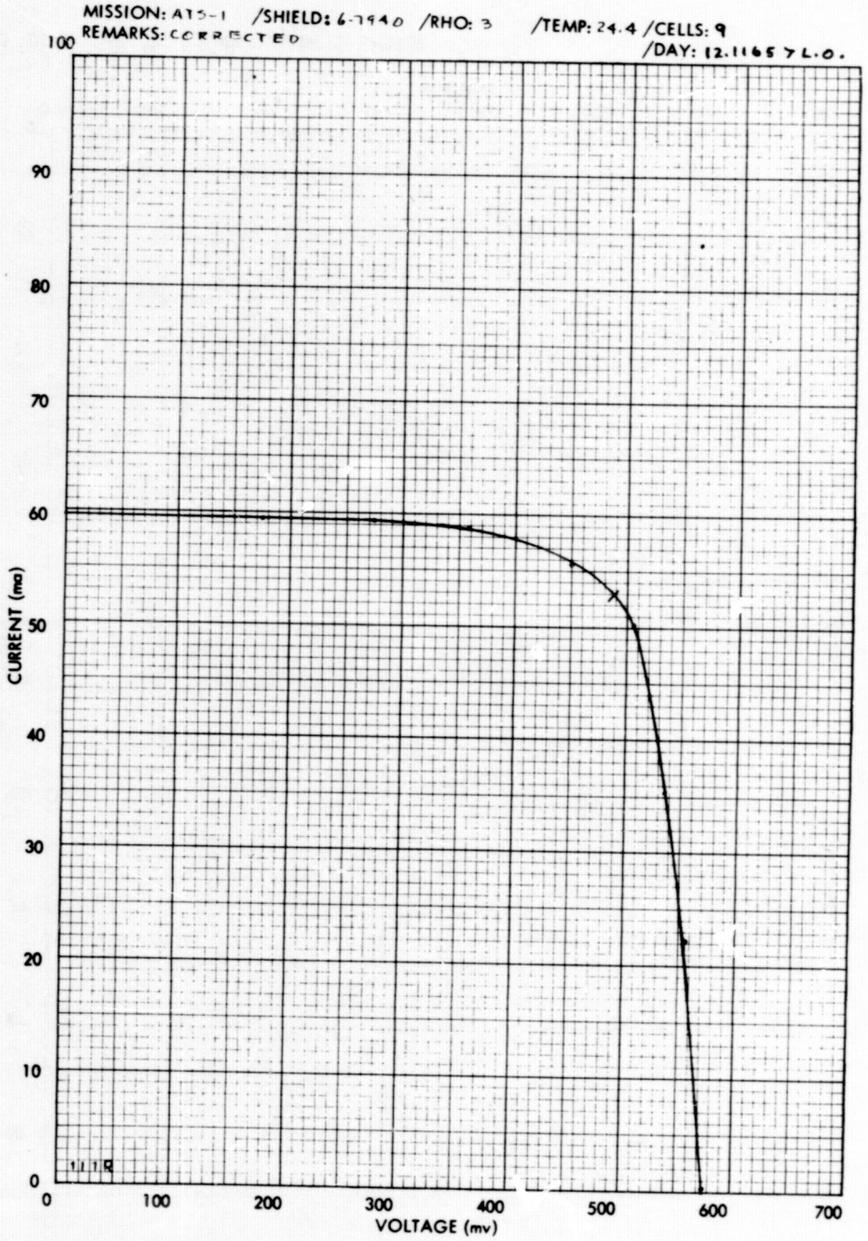


Figure 110. Cell 9, Days 0.064 and 3.2. Corrected Data





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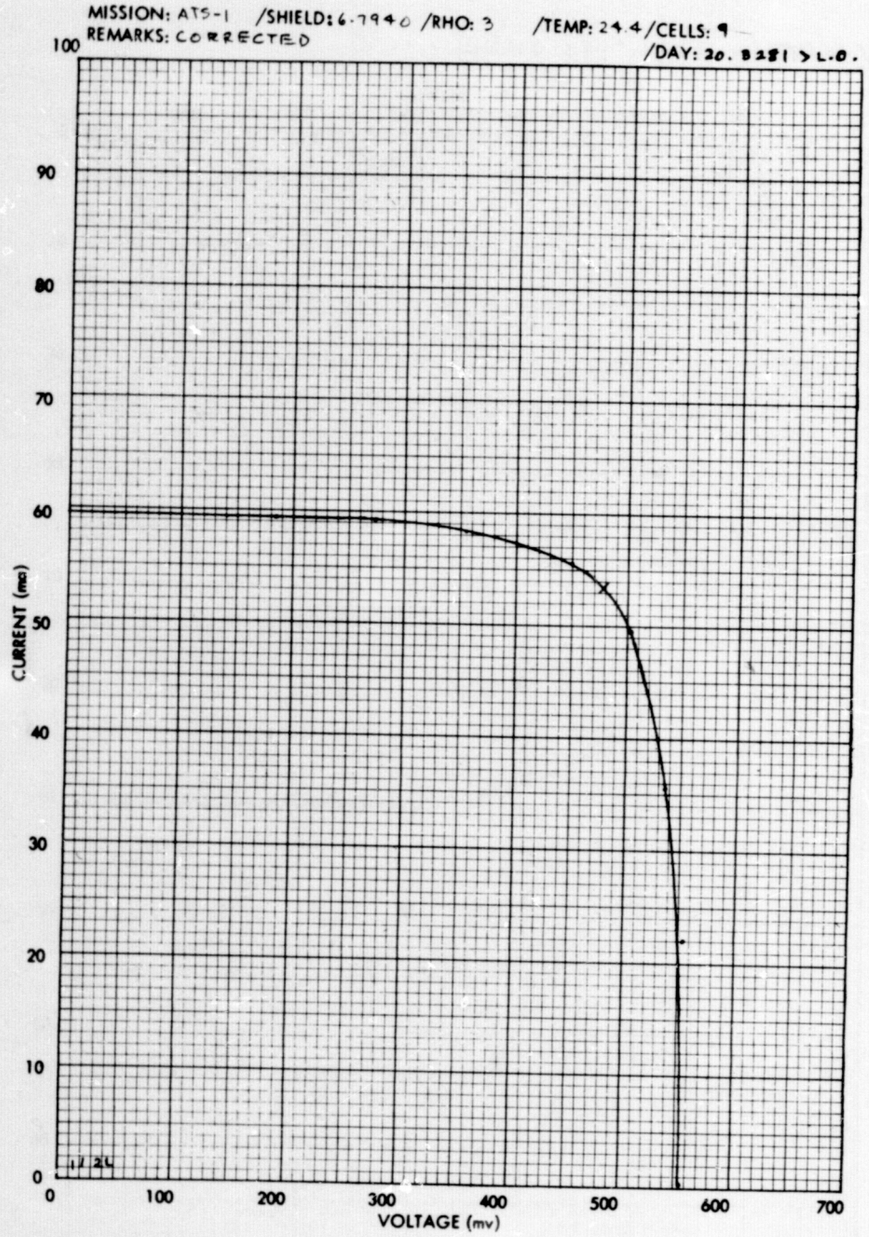


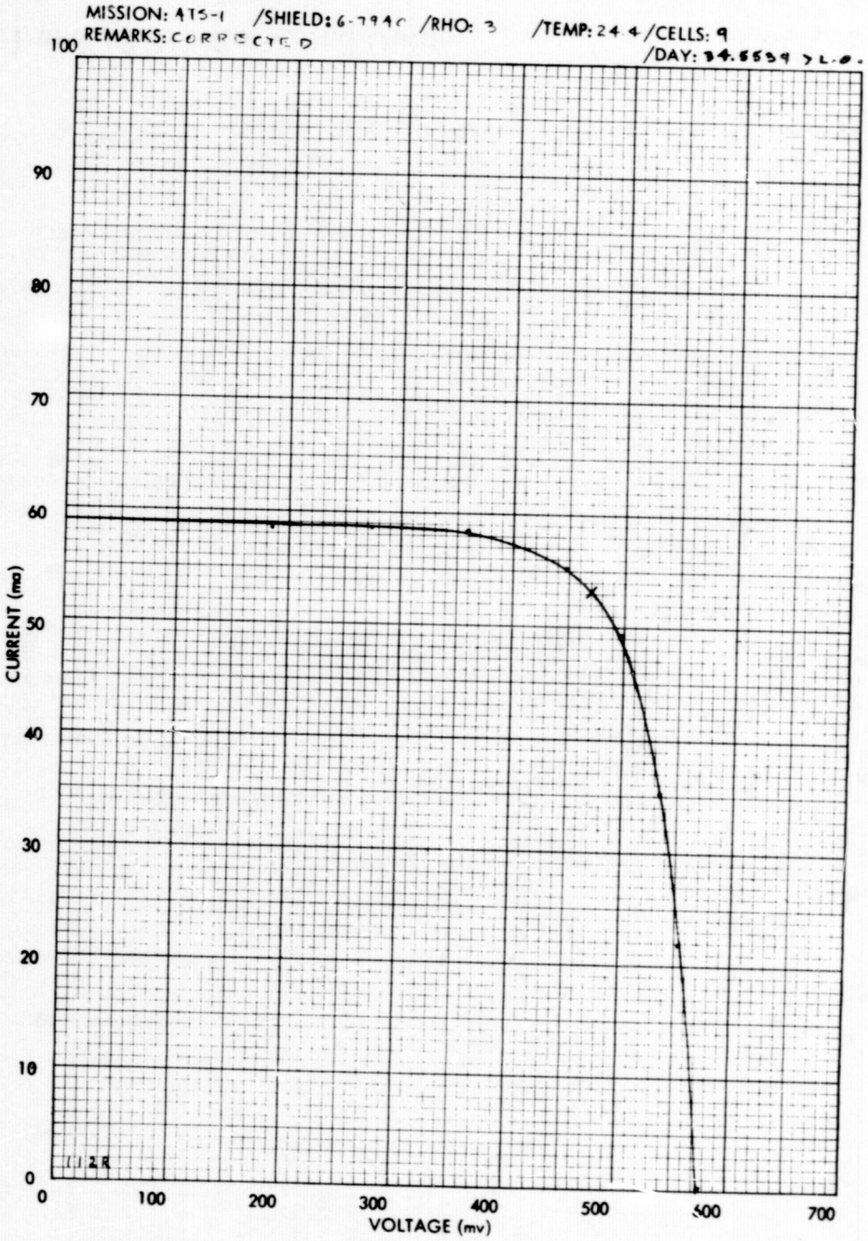
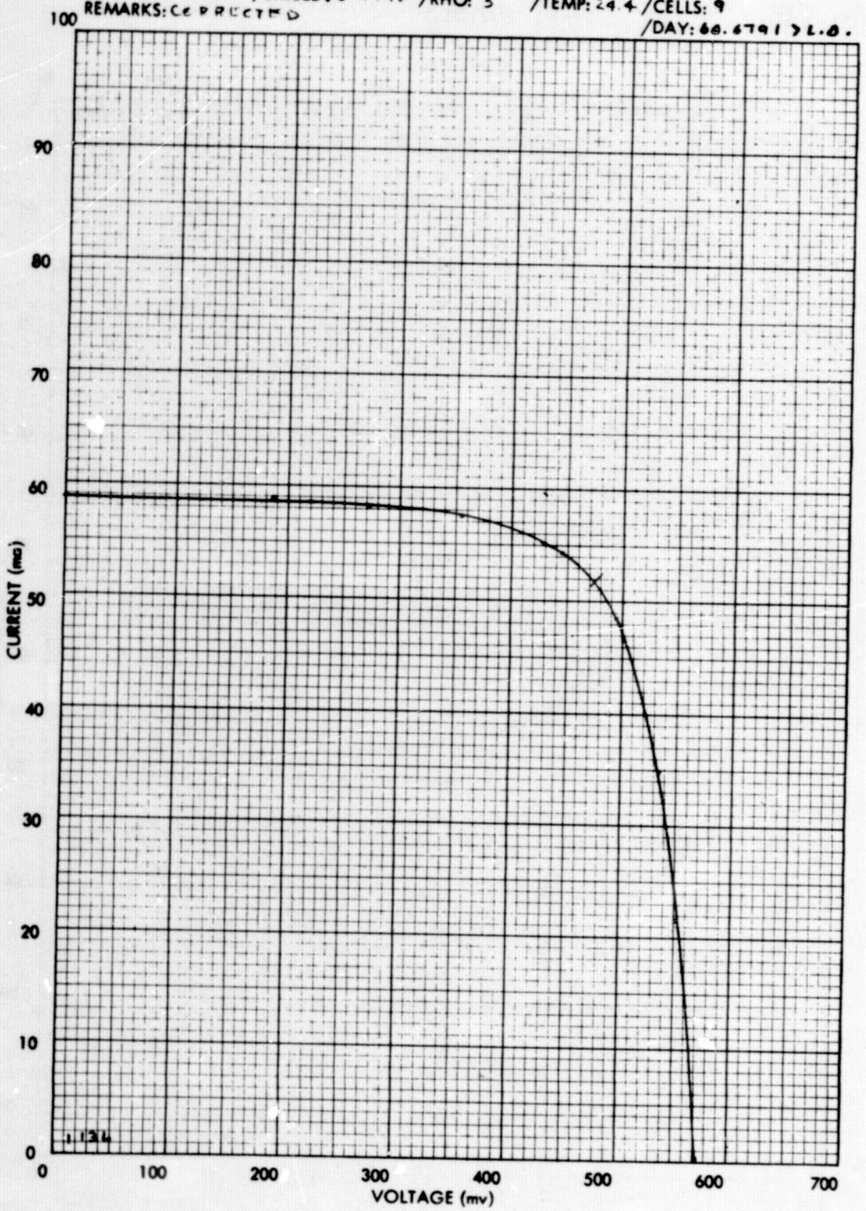


Figure 112. Cell 9, Days 20.3 and 34.5. Corrected Data



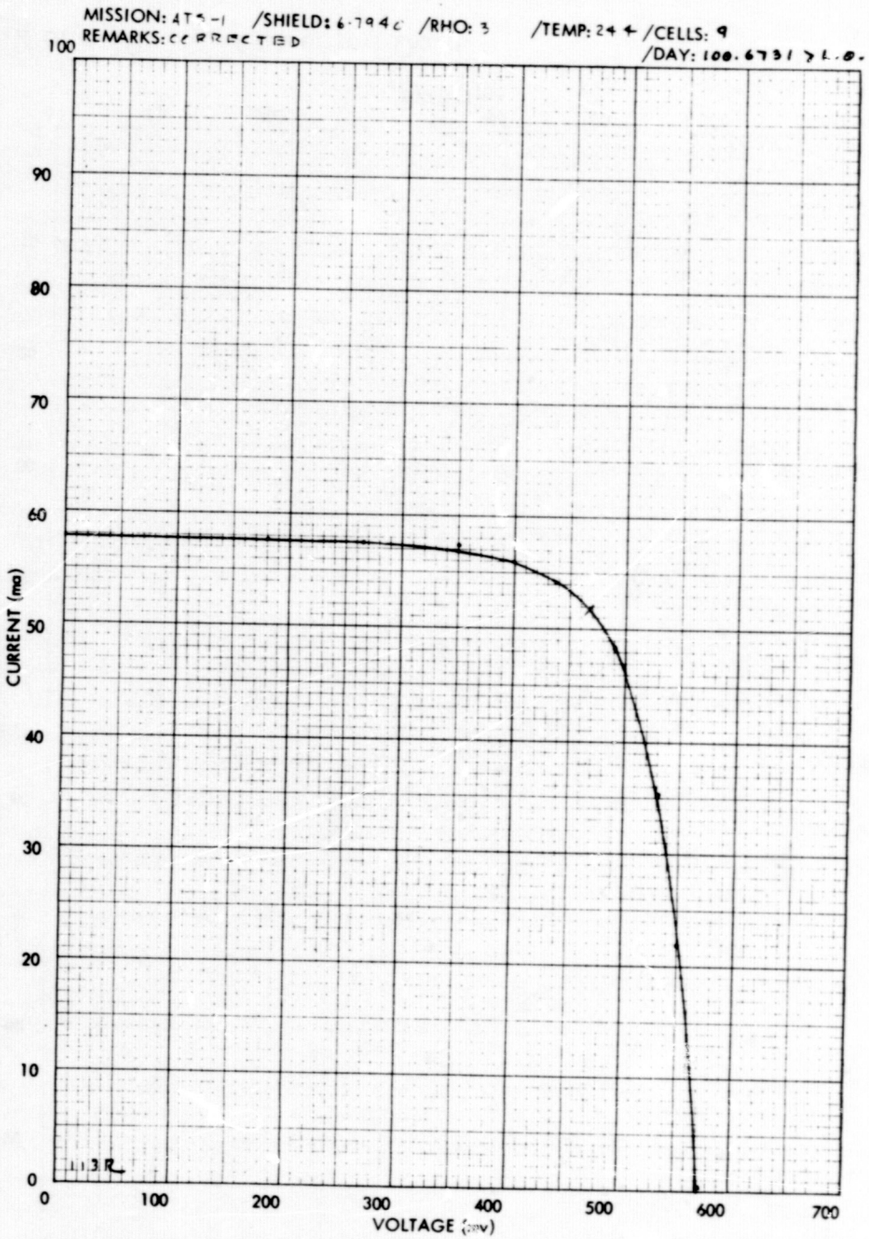
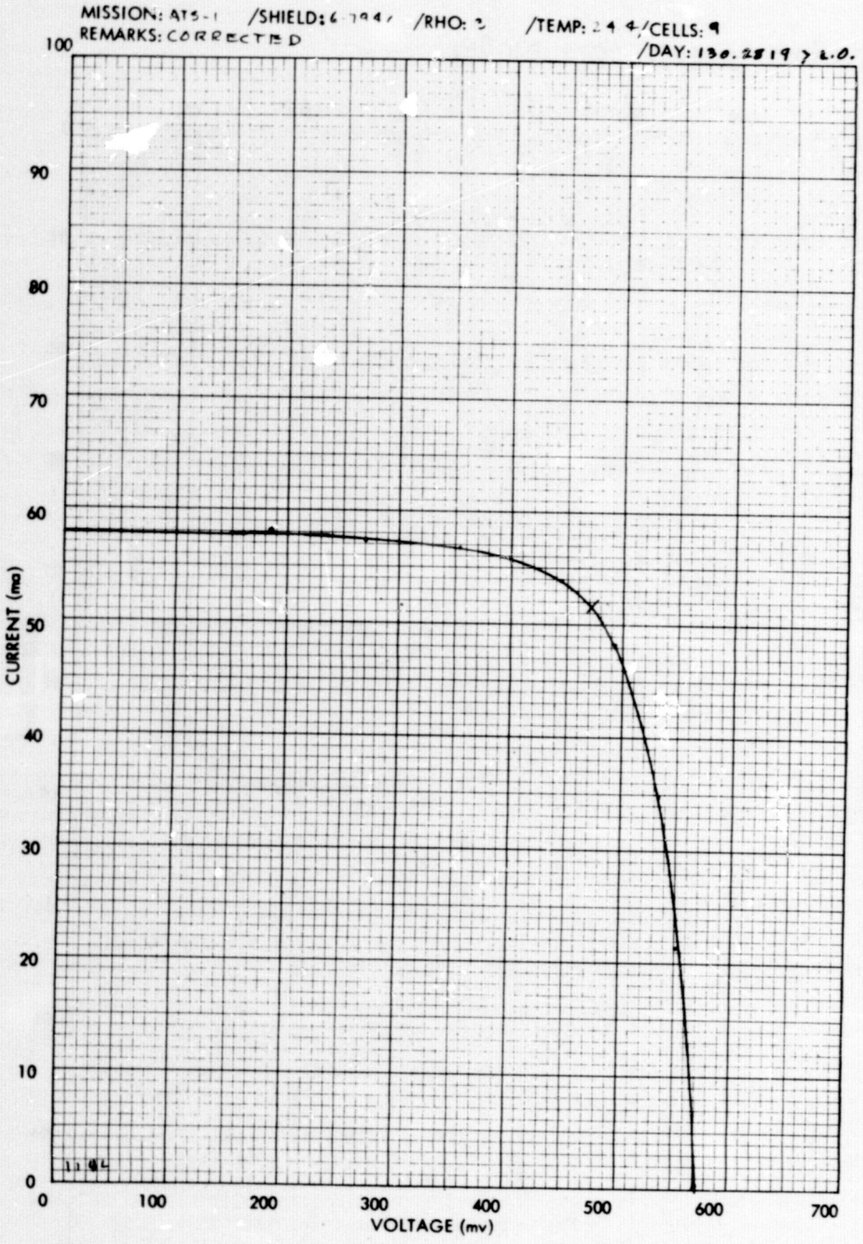
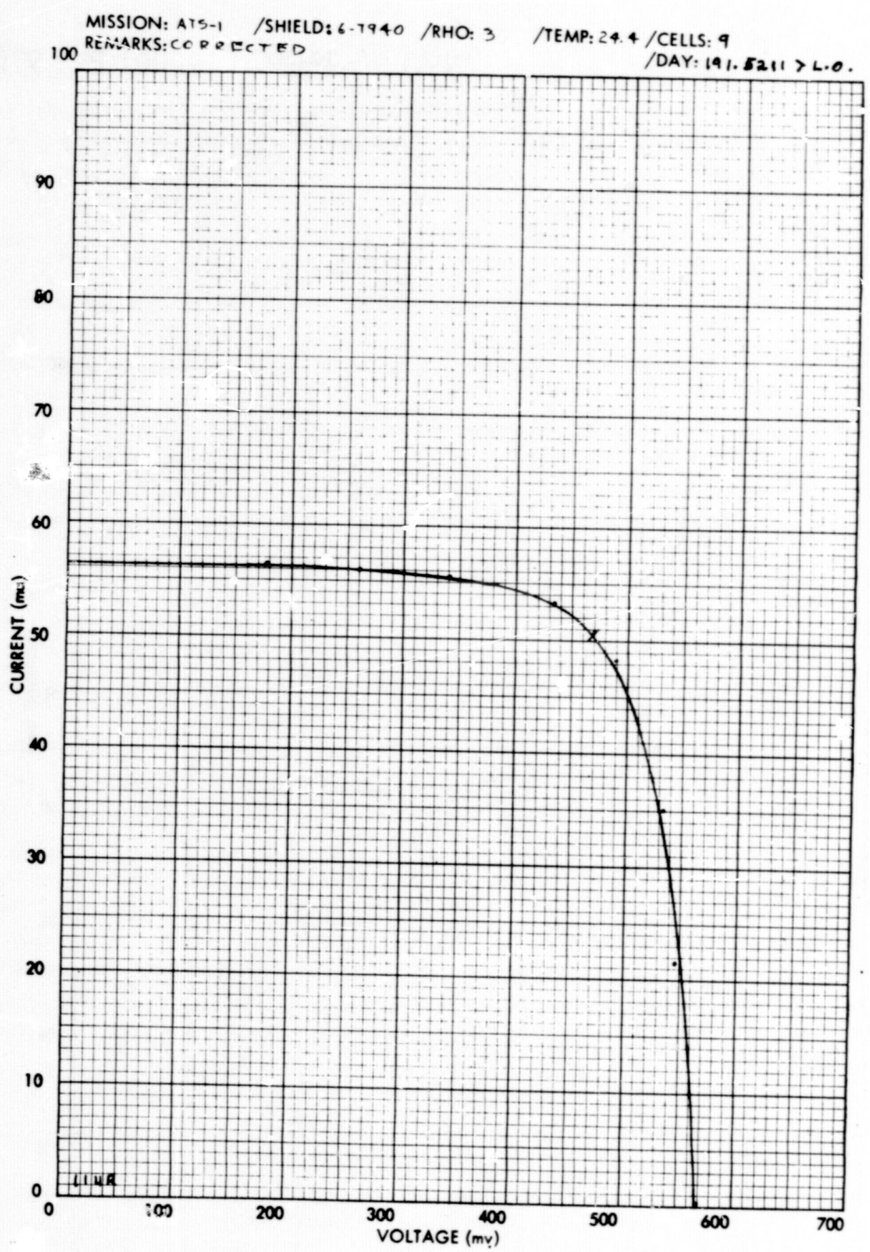


Figure 113. Cell 9, Days 60.6 and 100.6. Corrected Data





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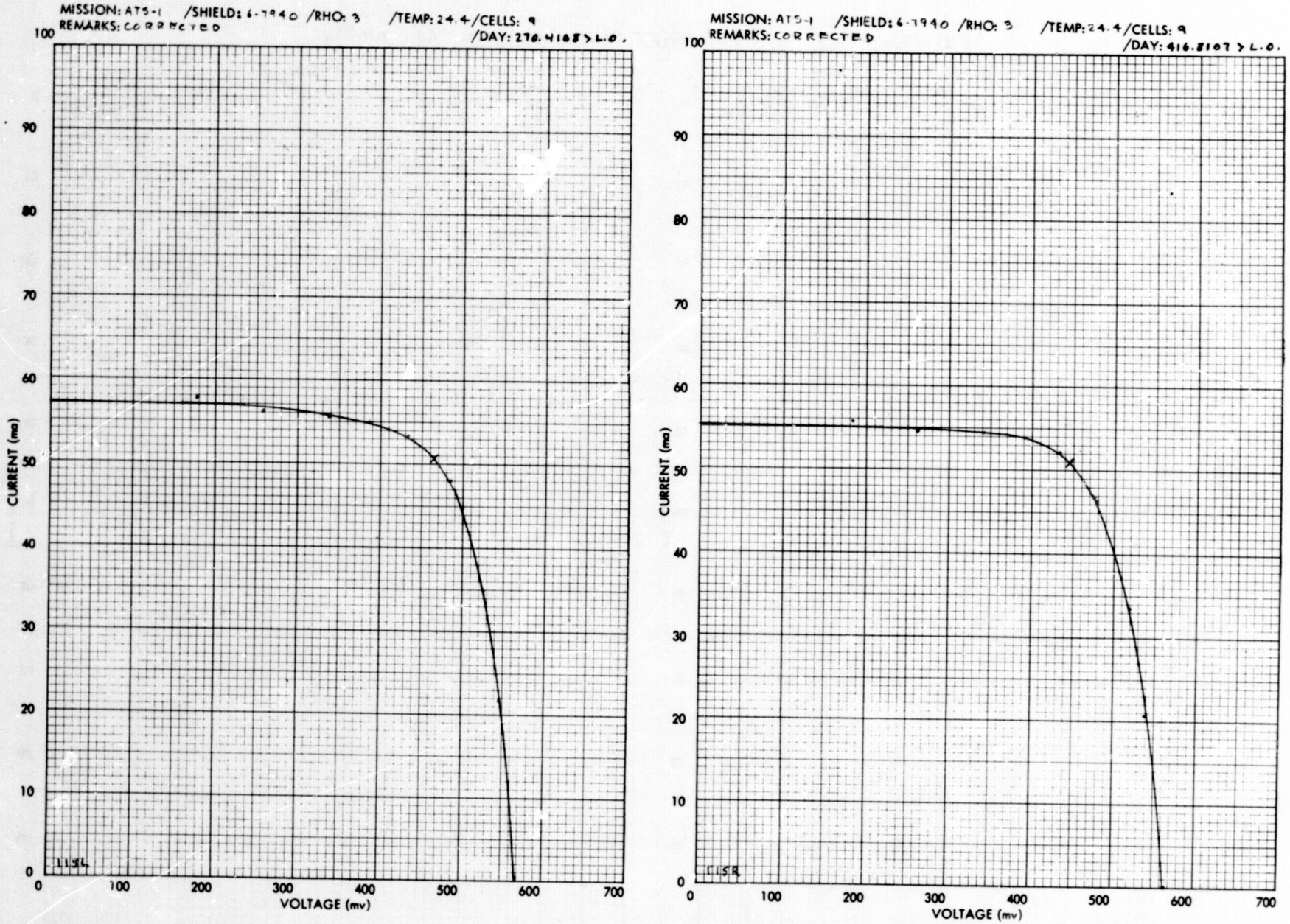
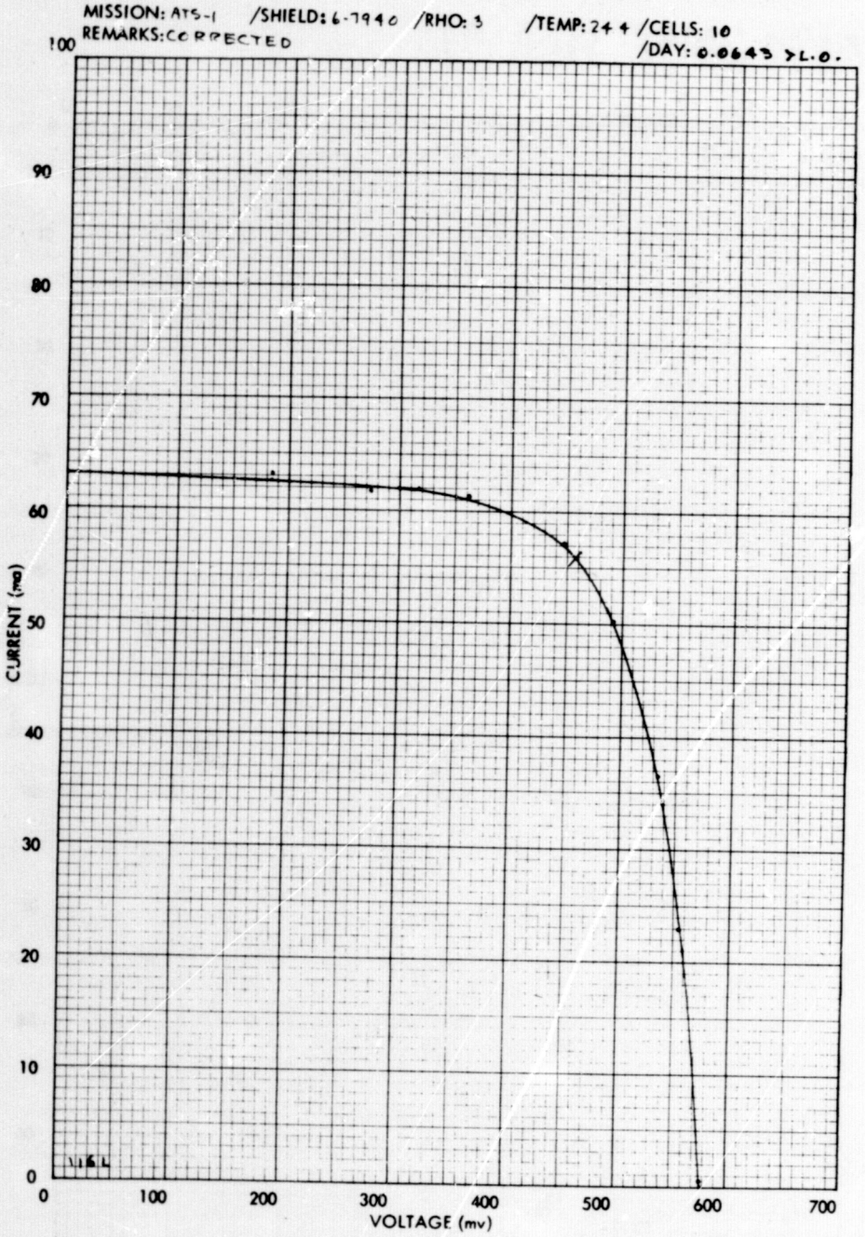


Figure 115. Cell 9, Days 270.4 and 416.8. Corrected Data



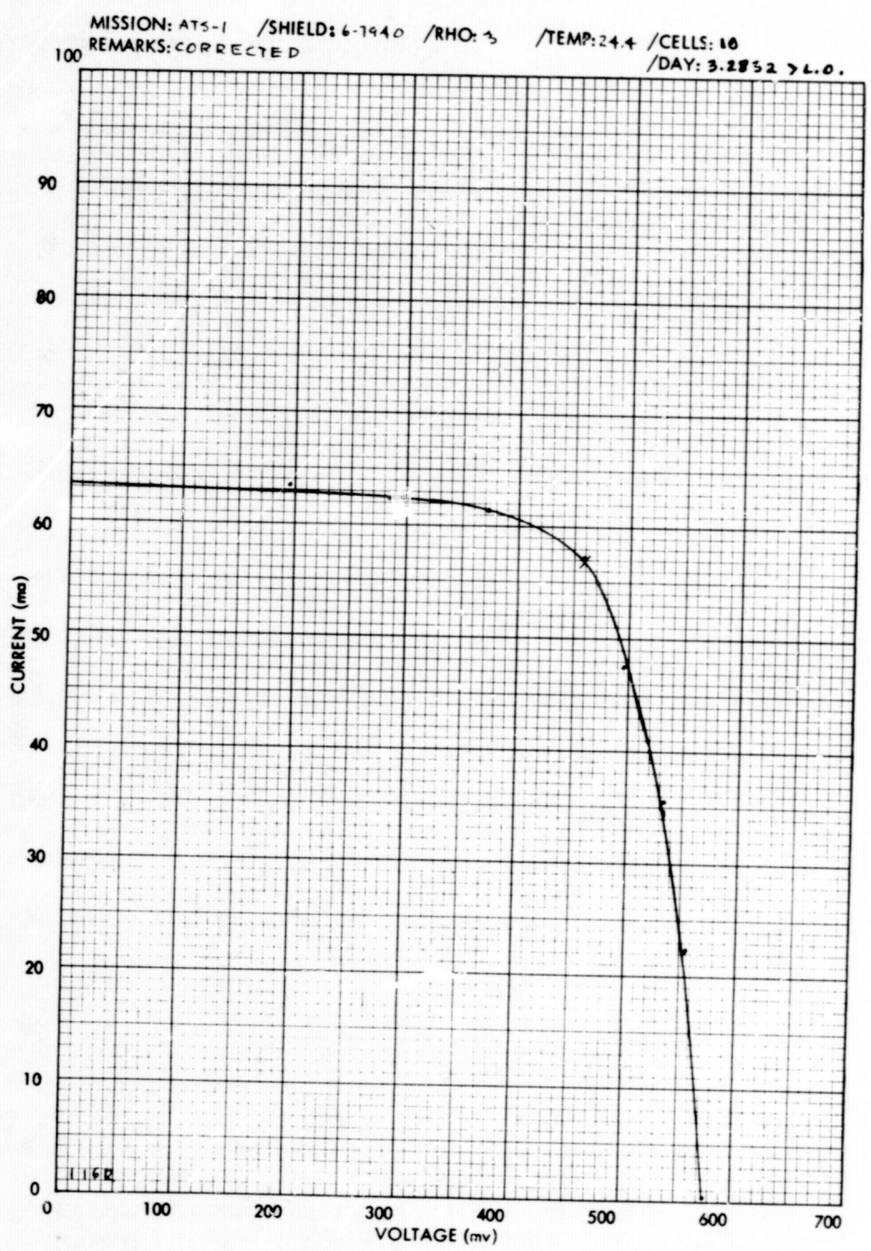
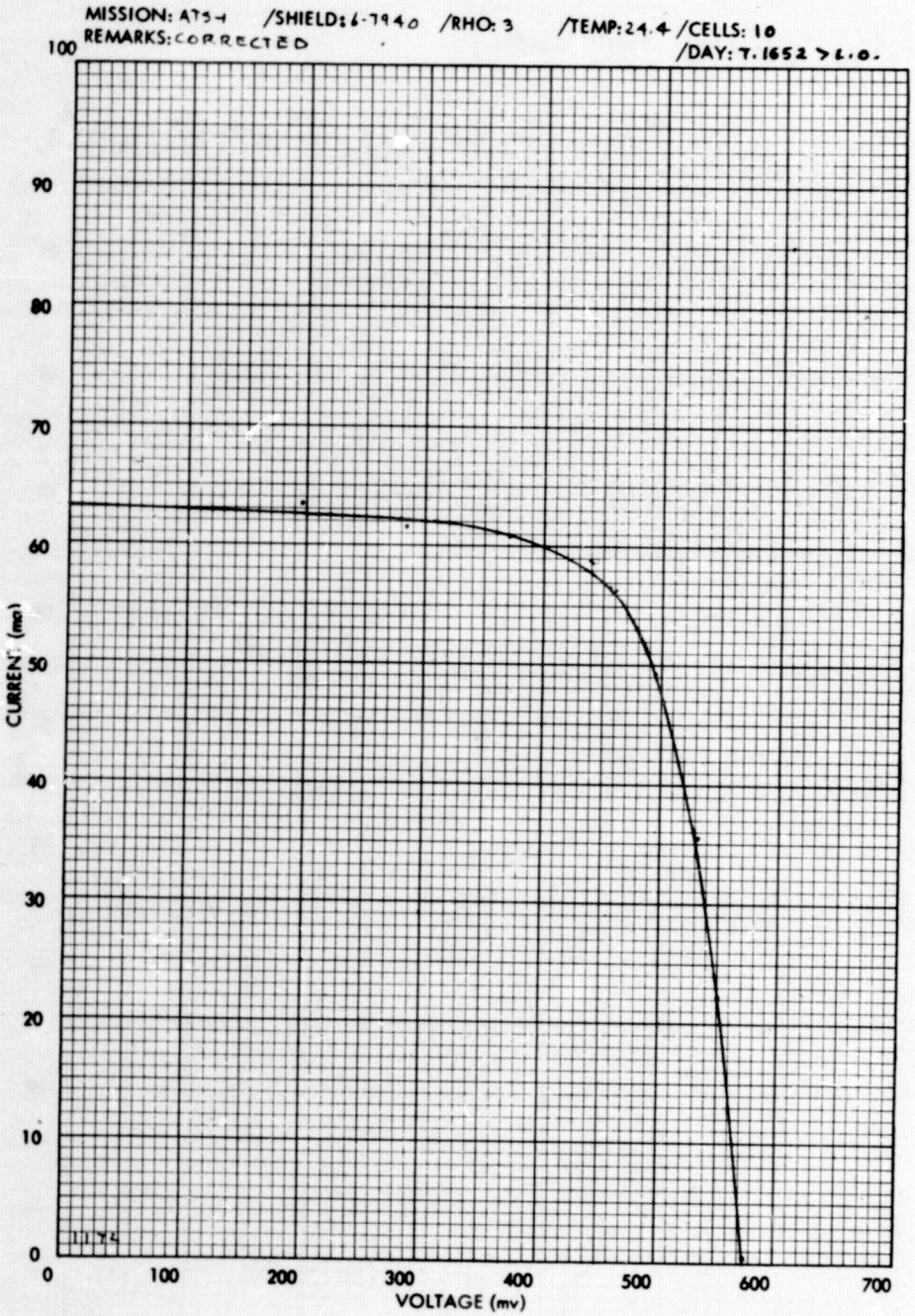
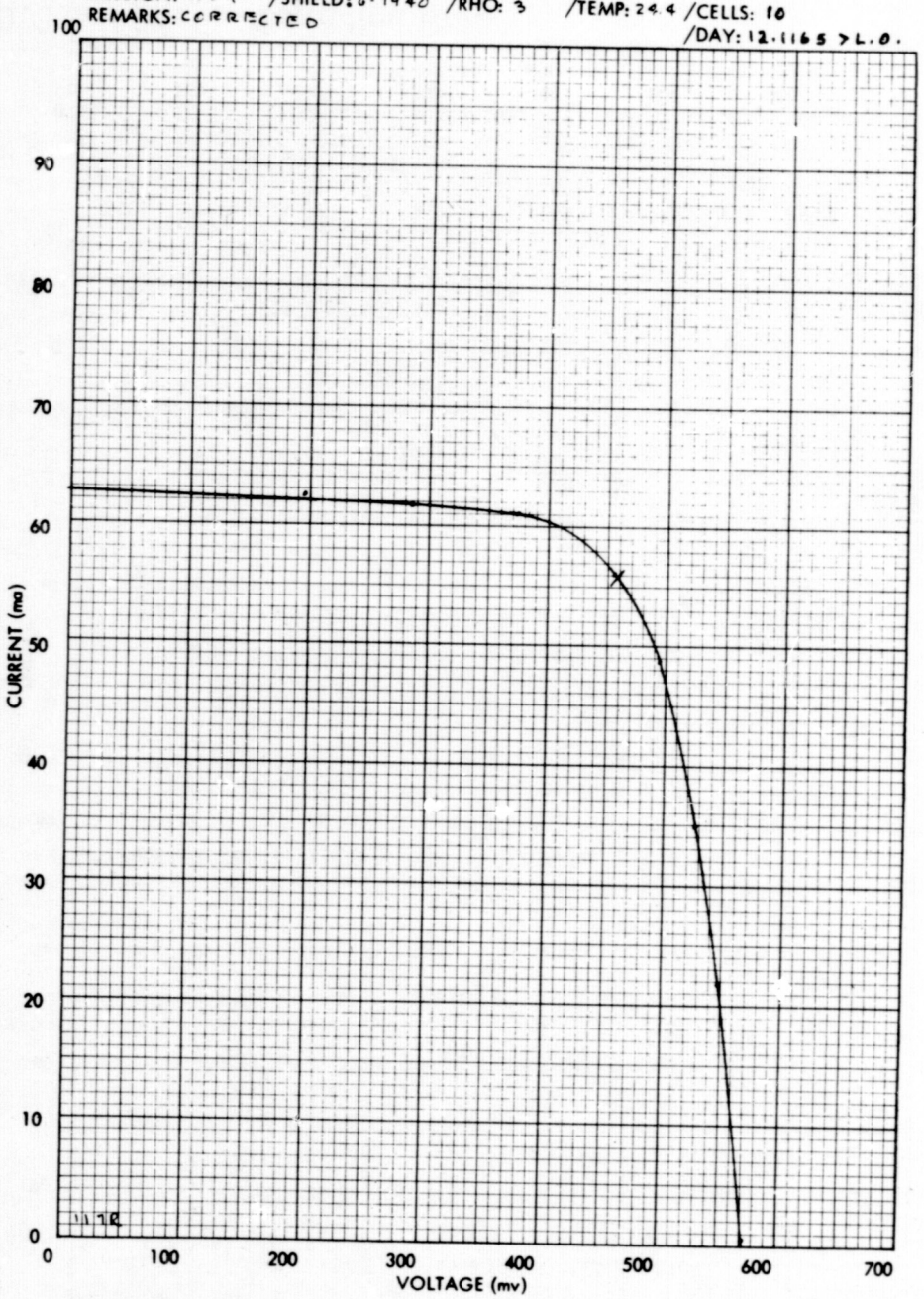


Figure 116. Cell 10, Days 0.064 and 3.2. Corrected Data





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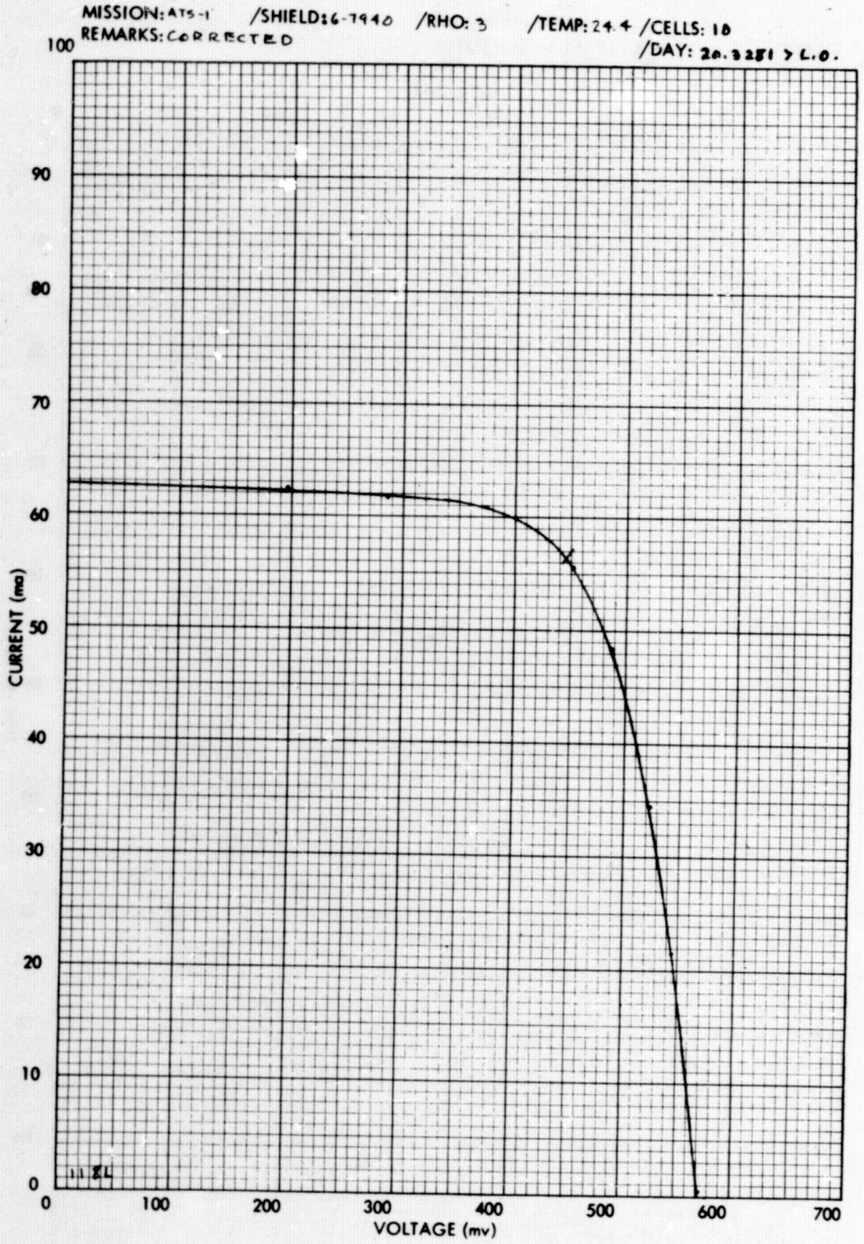


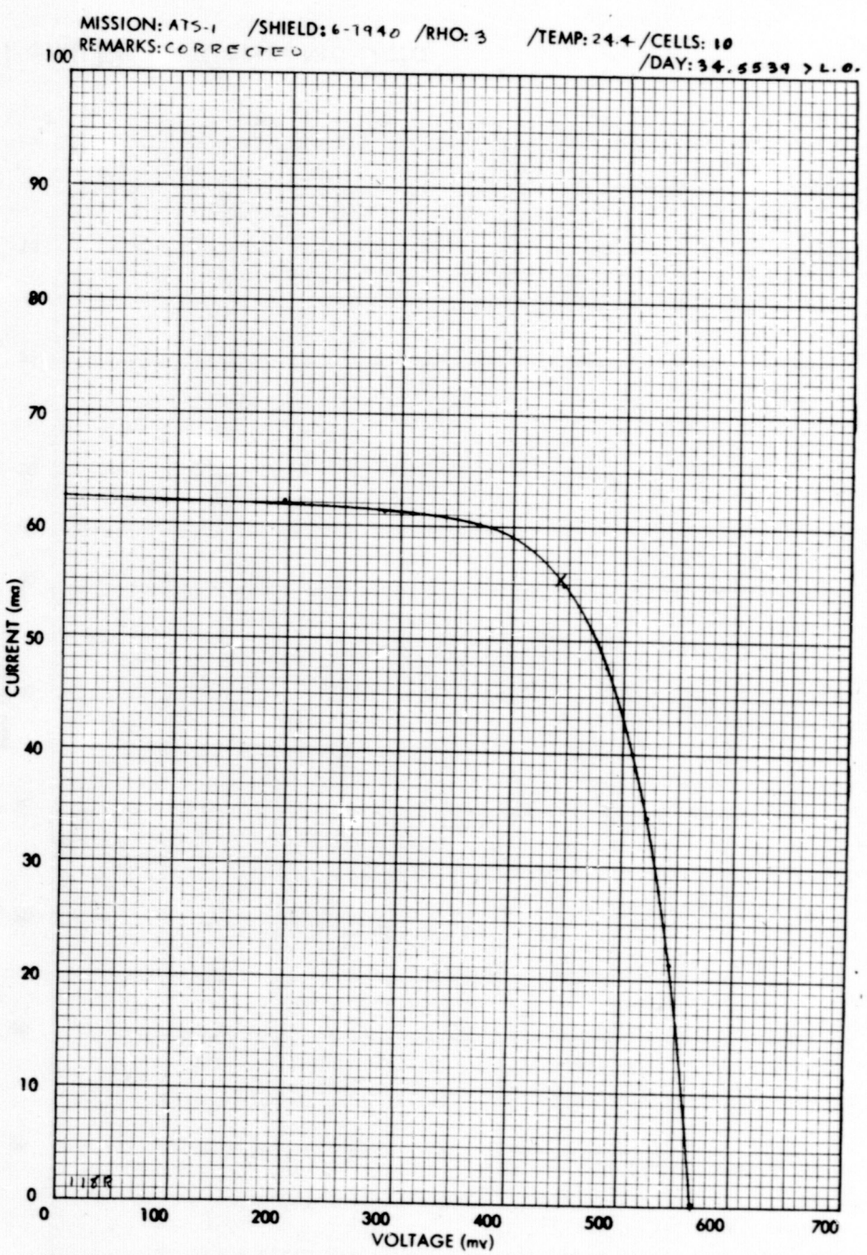


Figure 118. Cell 10, Days 20.3 and 34.5. Corrected Data

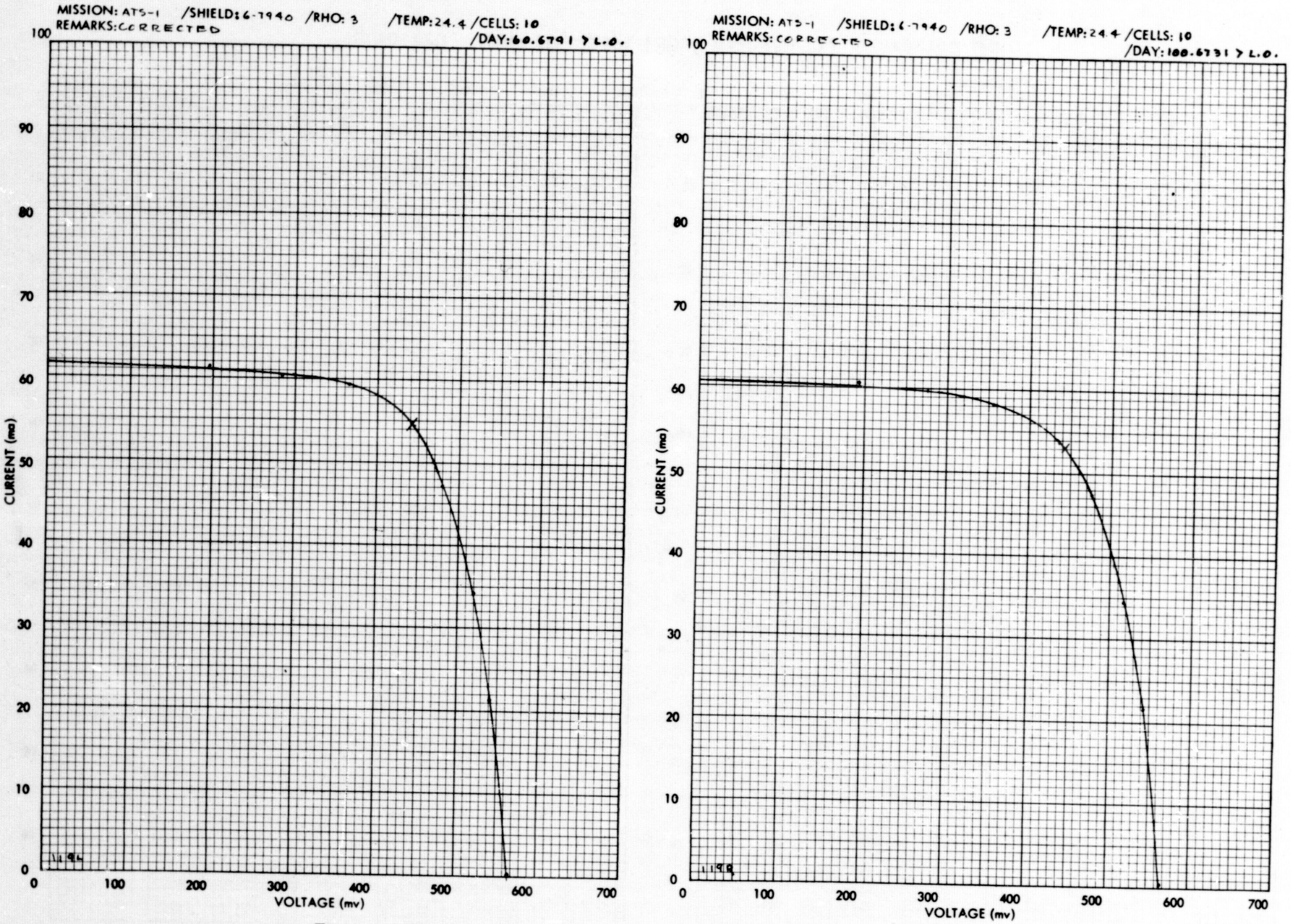
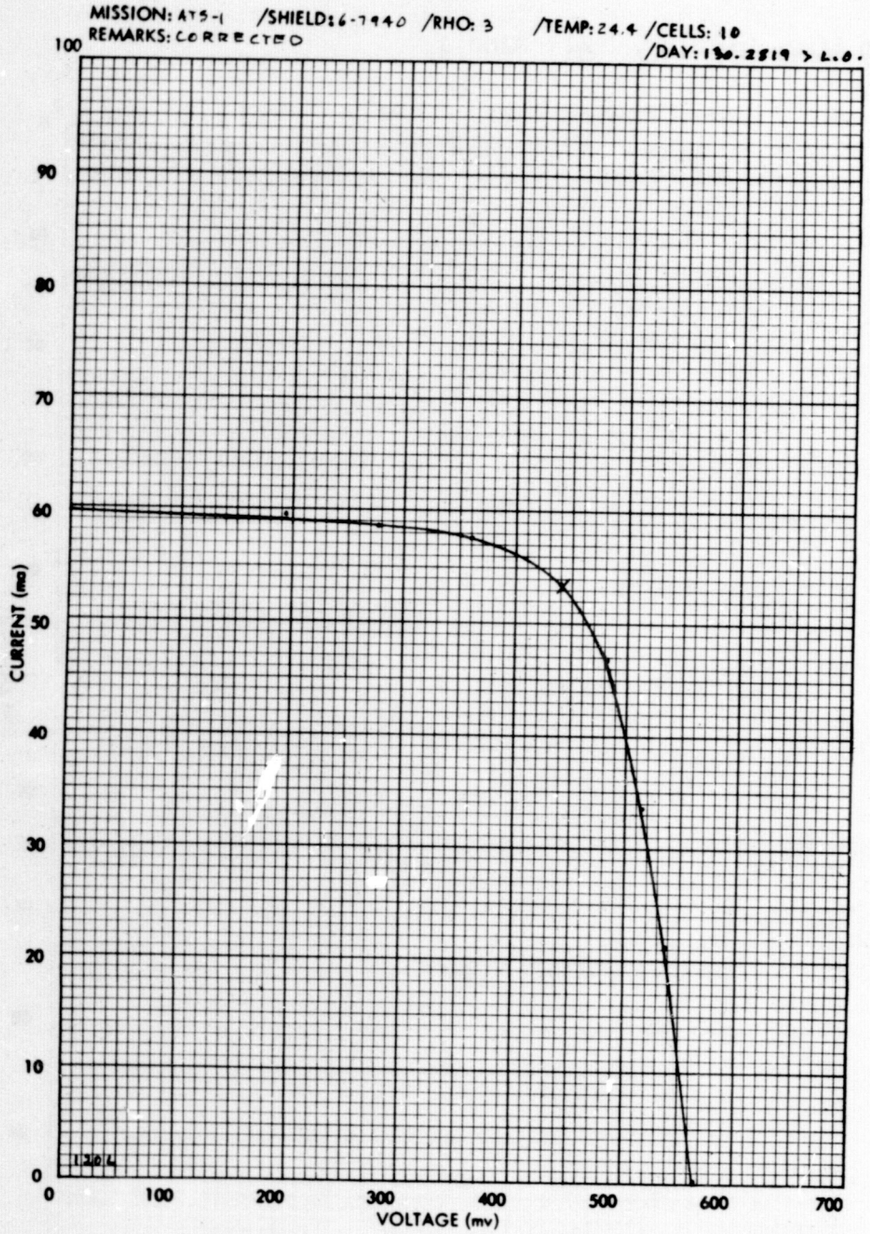


Figure 119. Cell 10, Days 60.6 and 100.6. Corrected Data



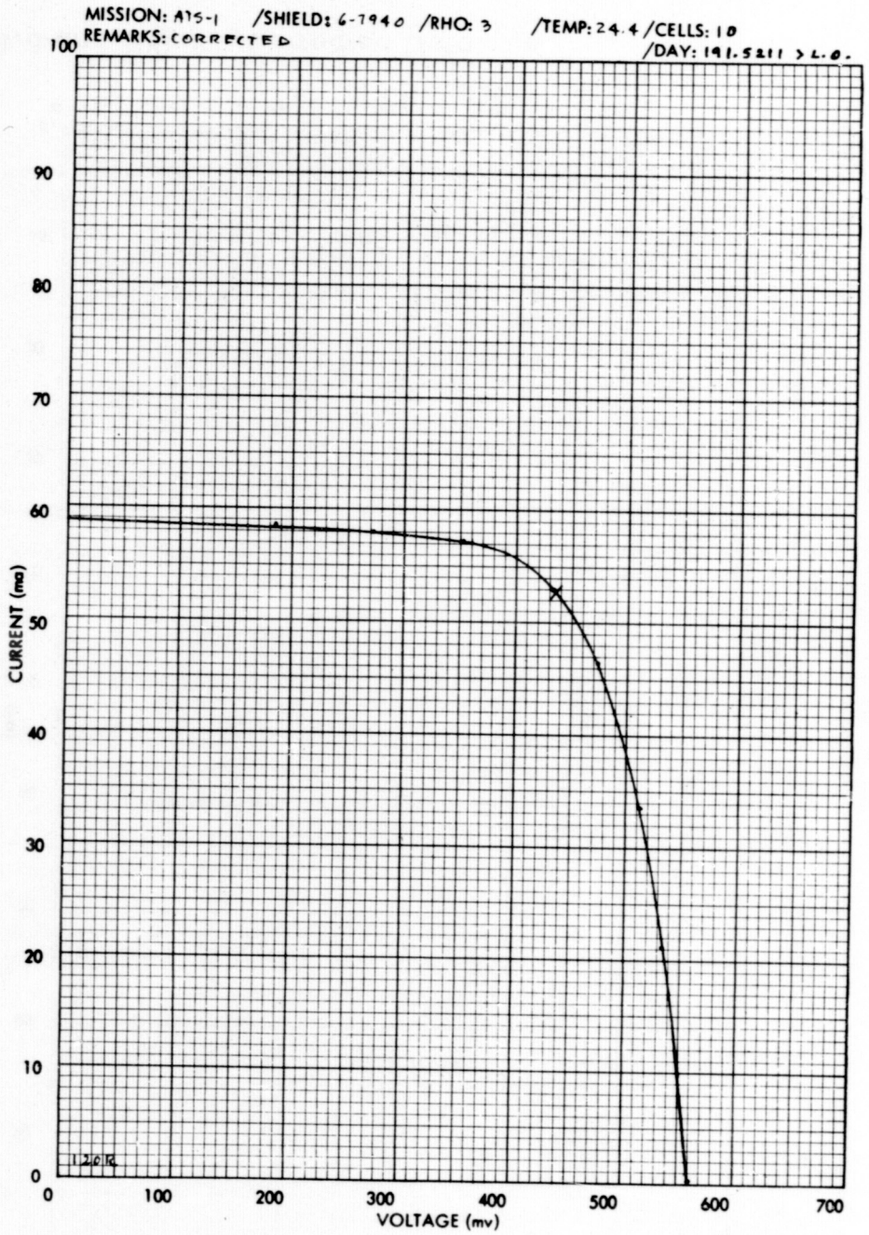
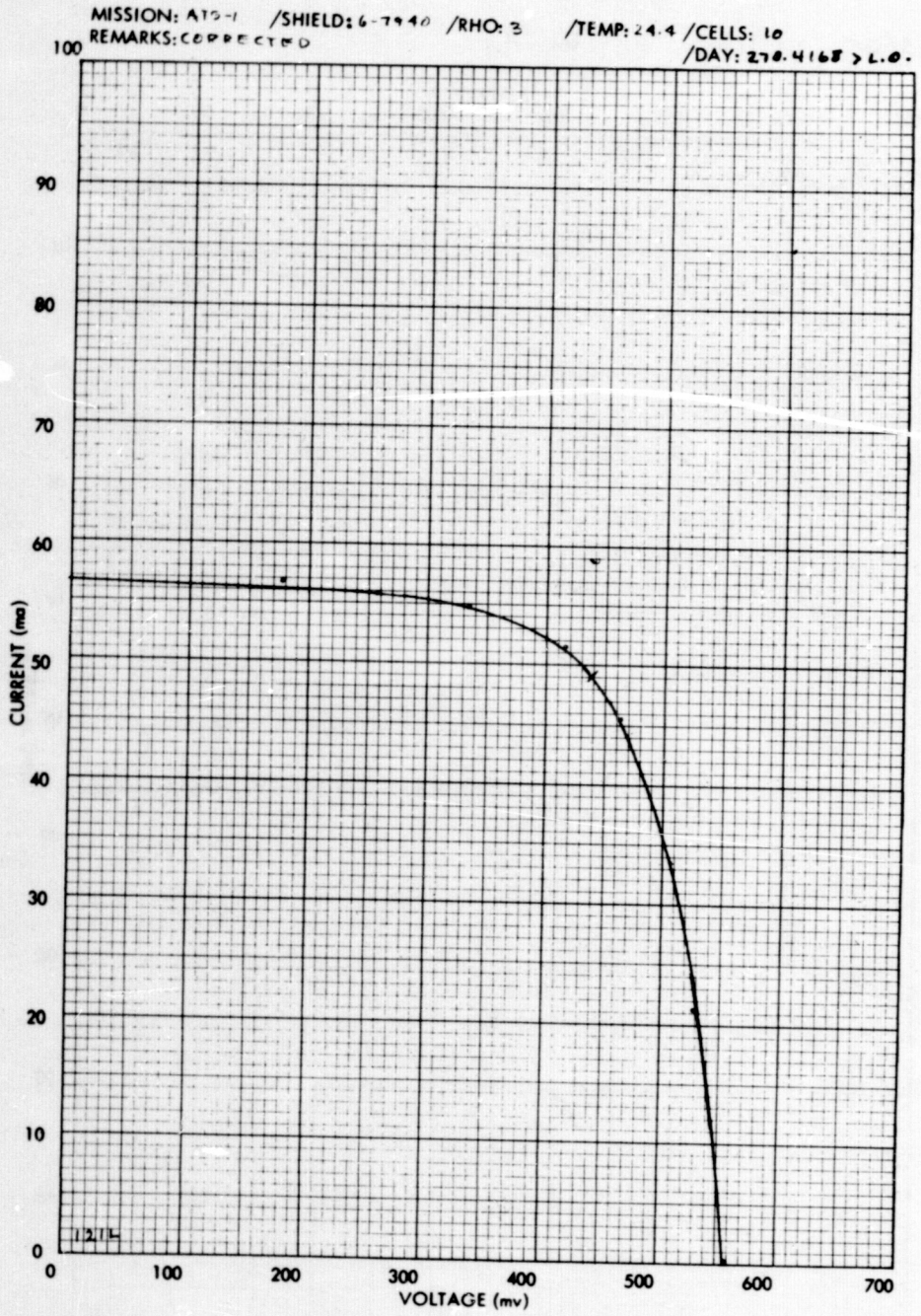


Figure 120. Cell 10, Days 130.2 and 191.5. Corrected Data



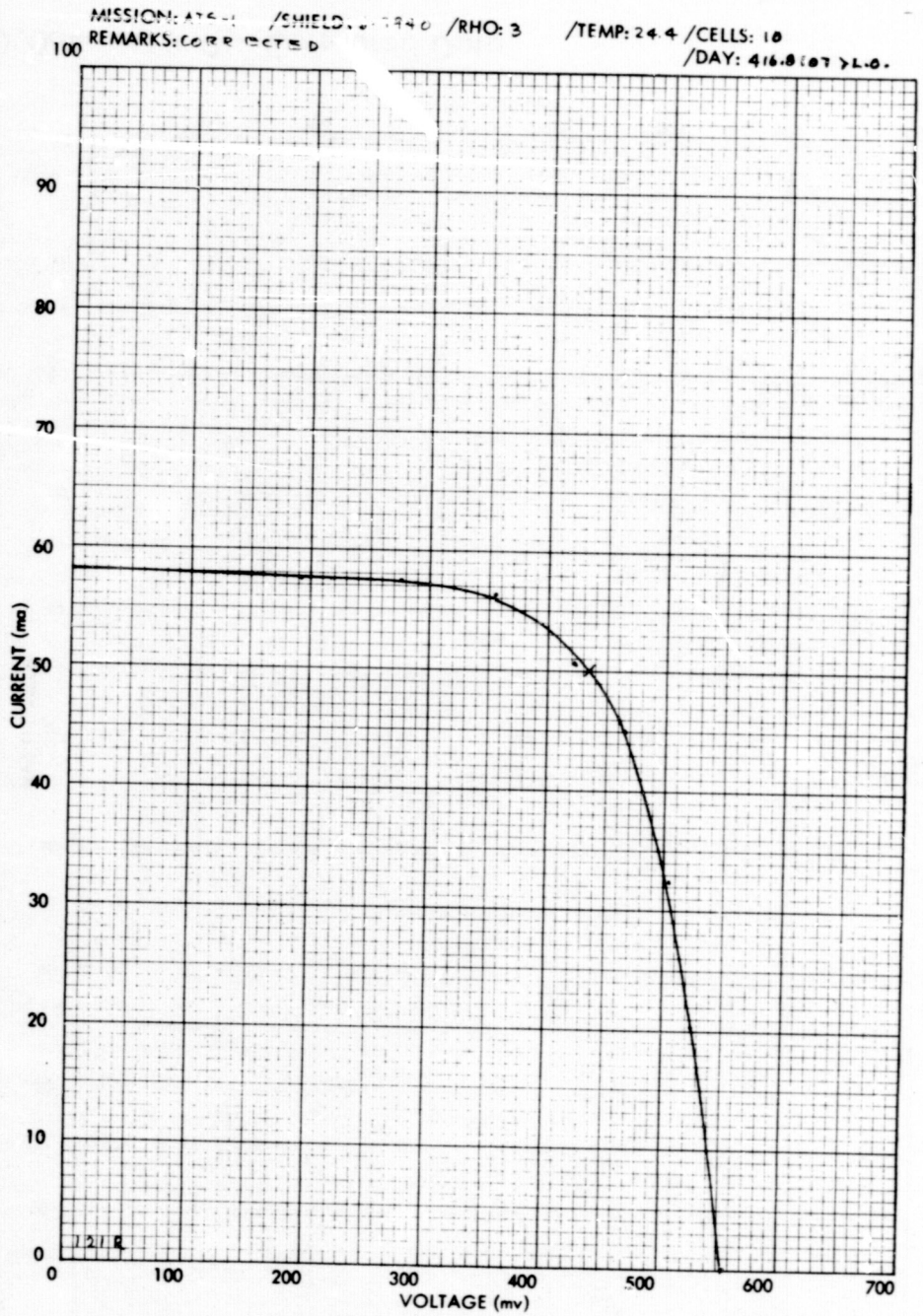
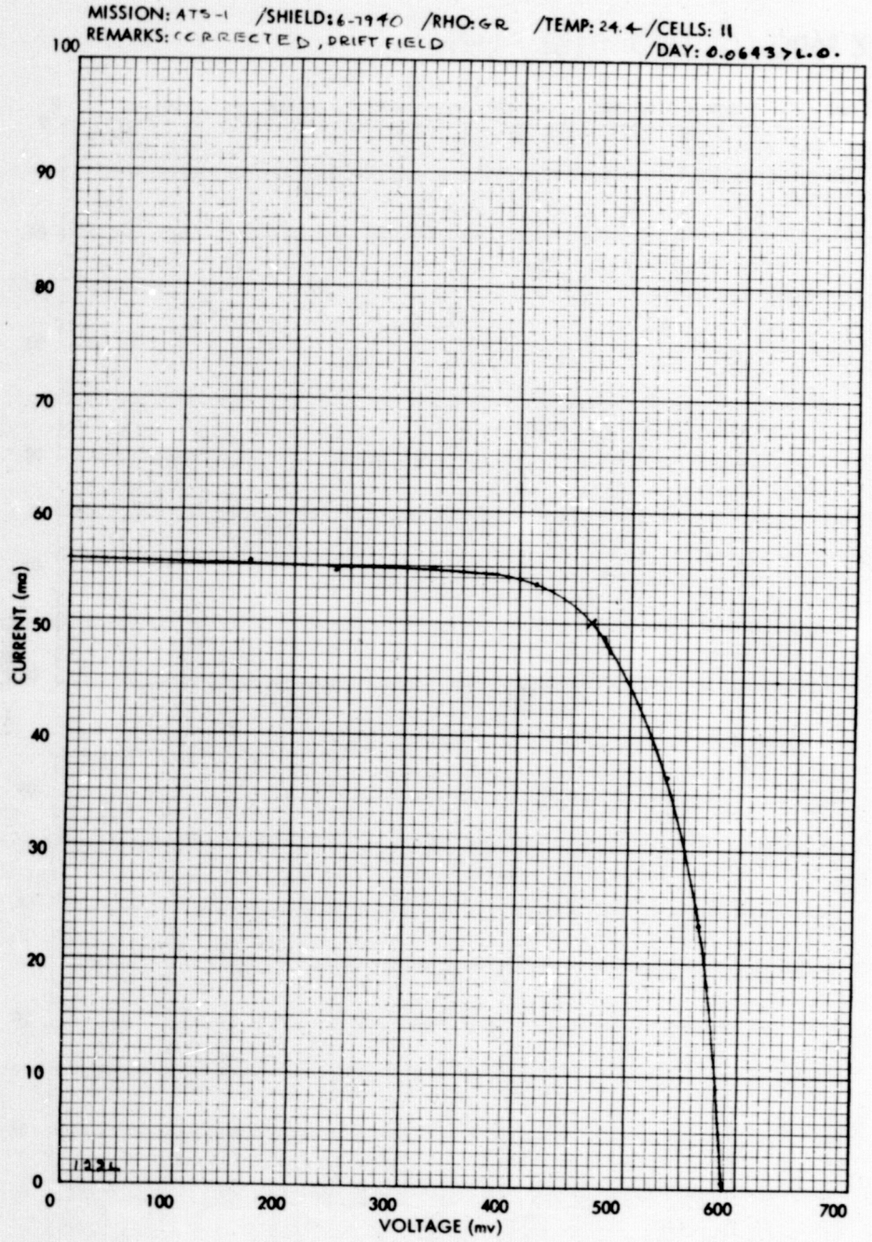


Figure 121. Cell 10, Days 270.4 and 416.8. Corrected Data



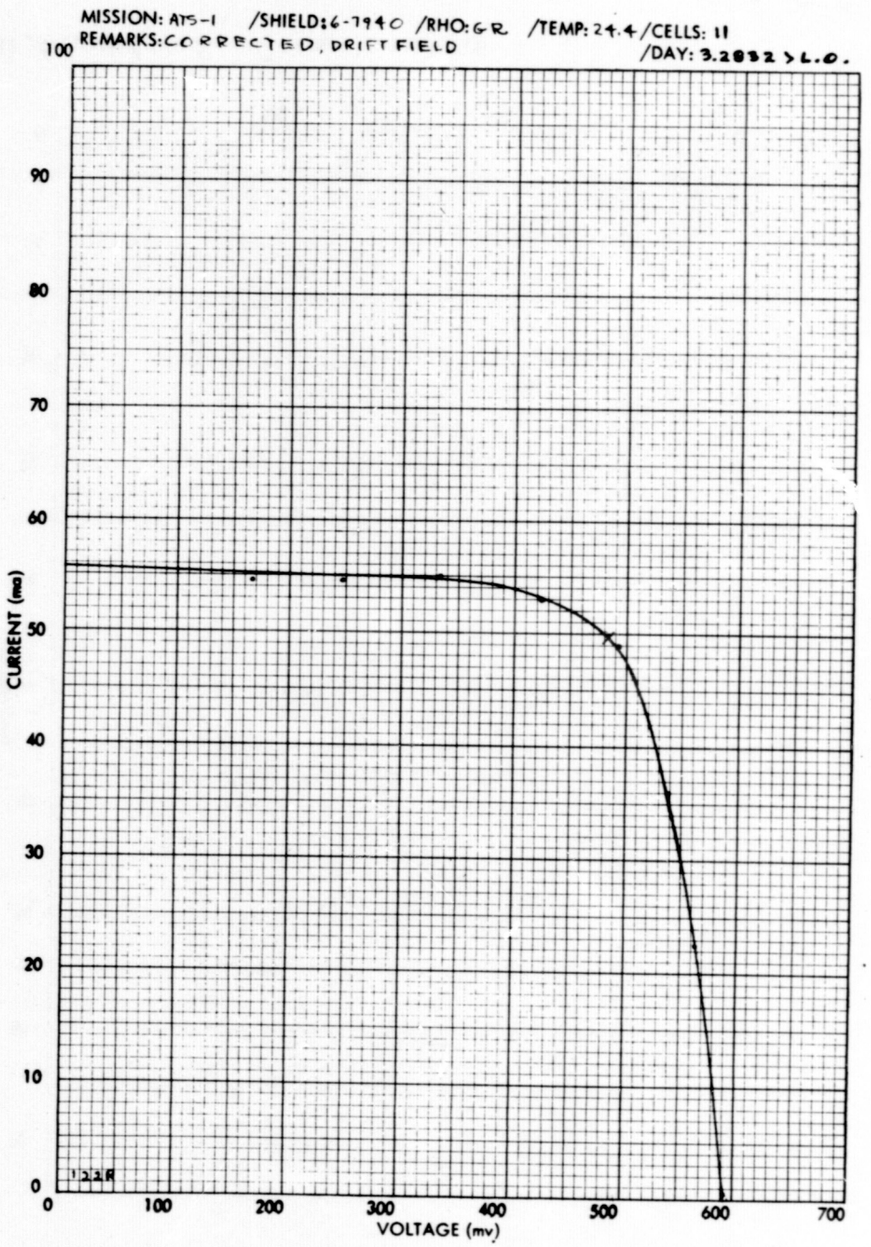


Figure 122. Cell 11, Days 0.064 and 3.2. Corrected Data

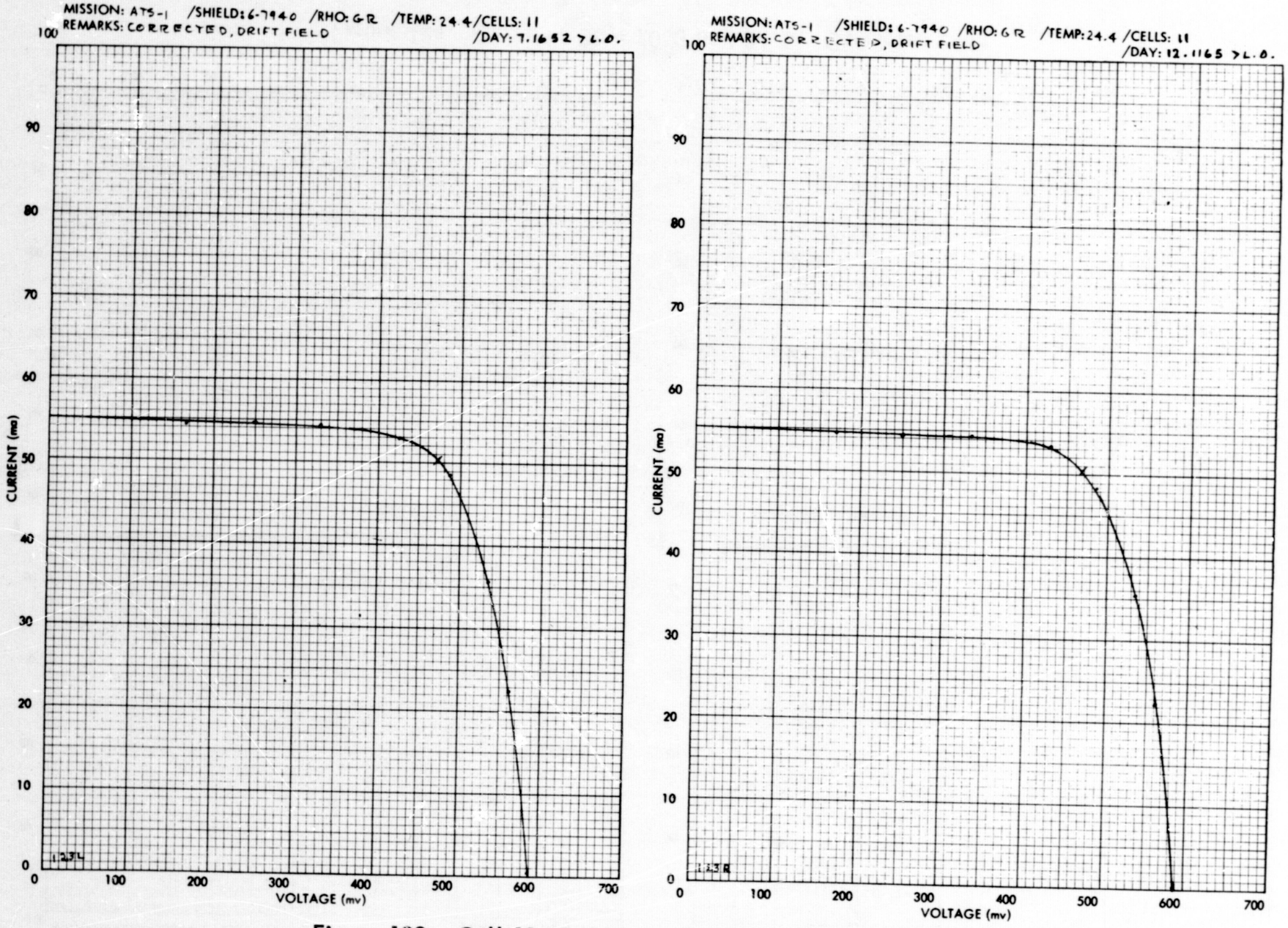
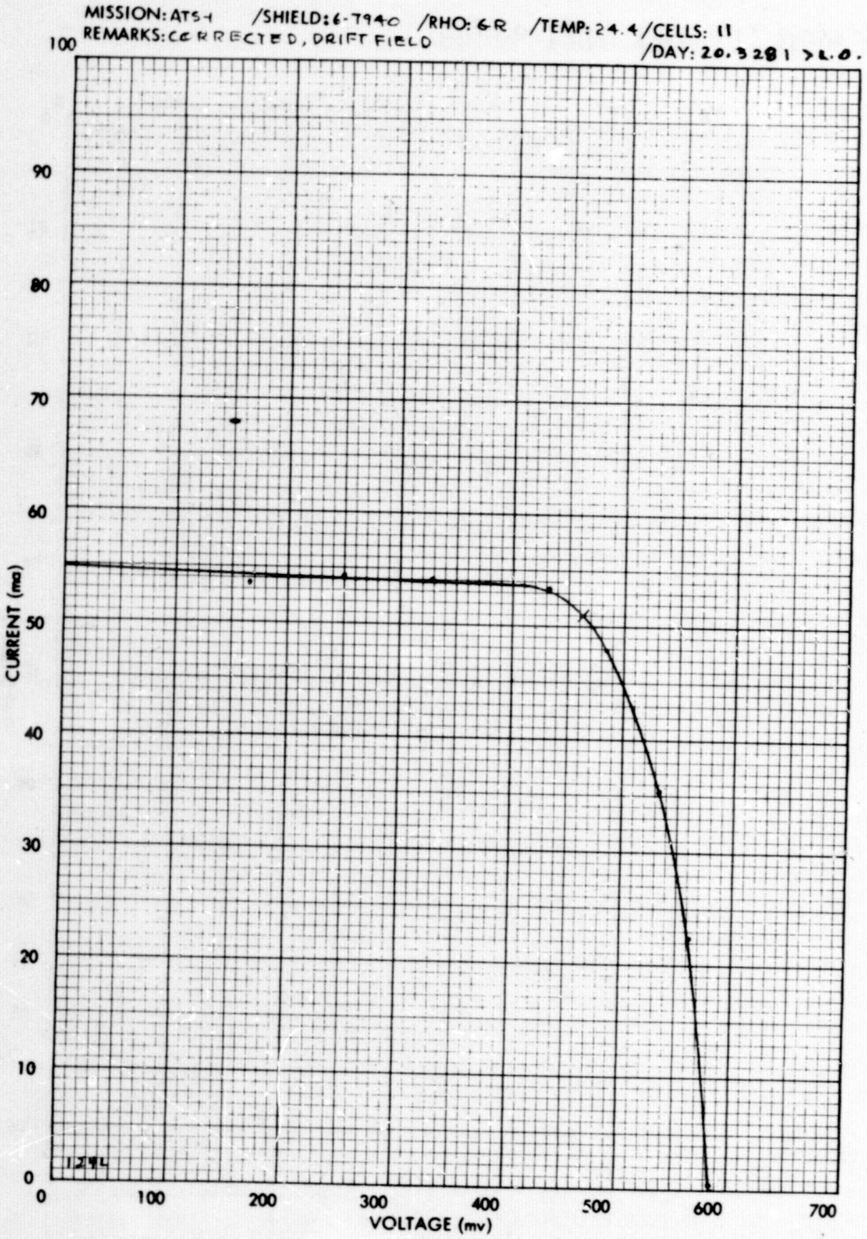


Figure 123. Cell 11, Days 7.1 and 12.1. Corrected Data



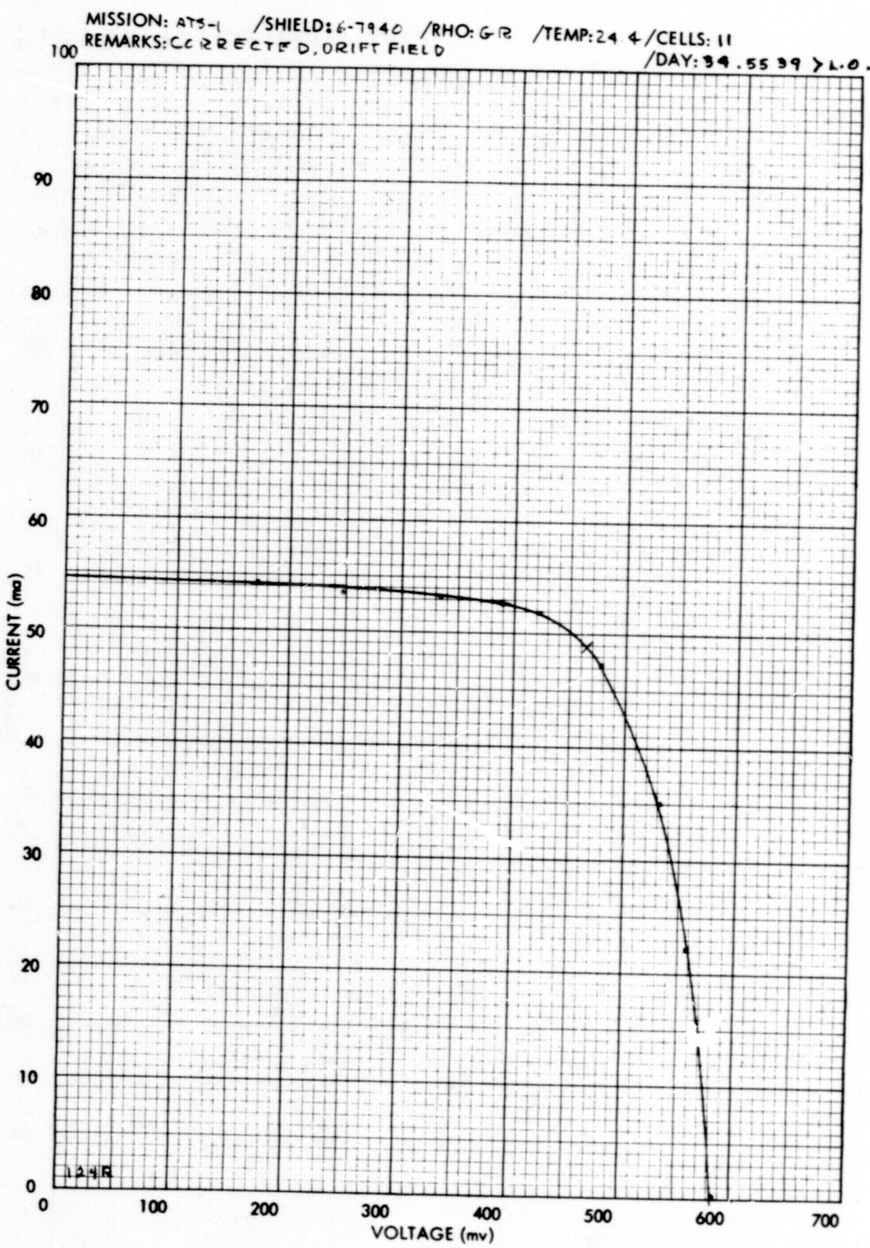
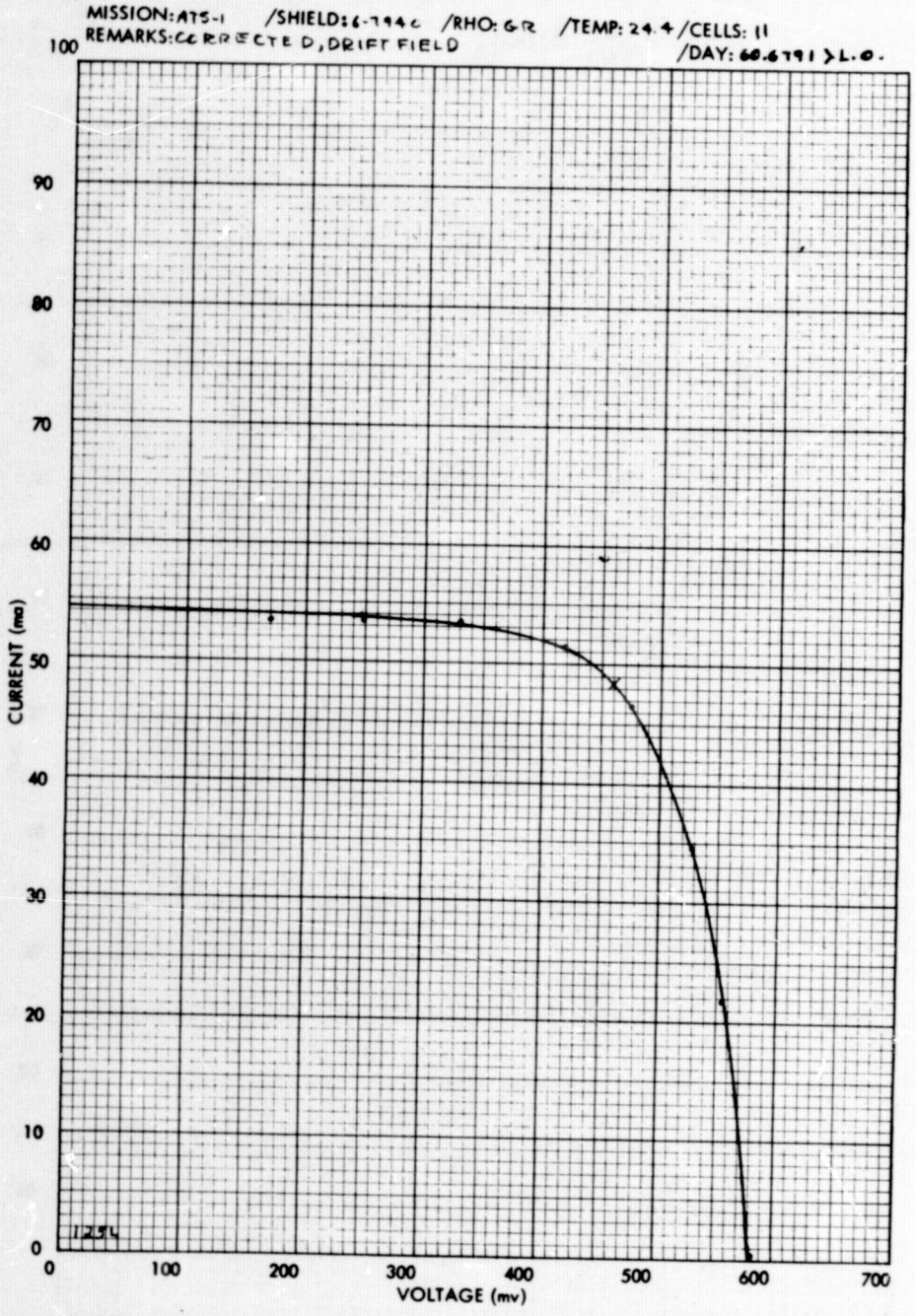


Figure 124. Cell 11, Days 20.3 and 34.5. Corrected Data



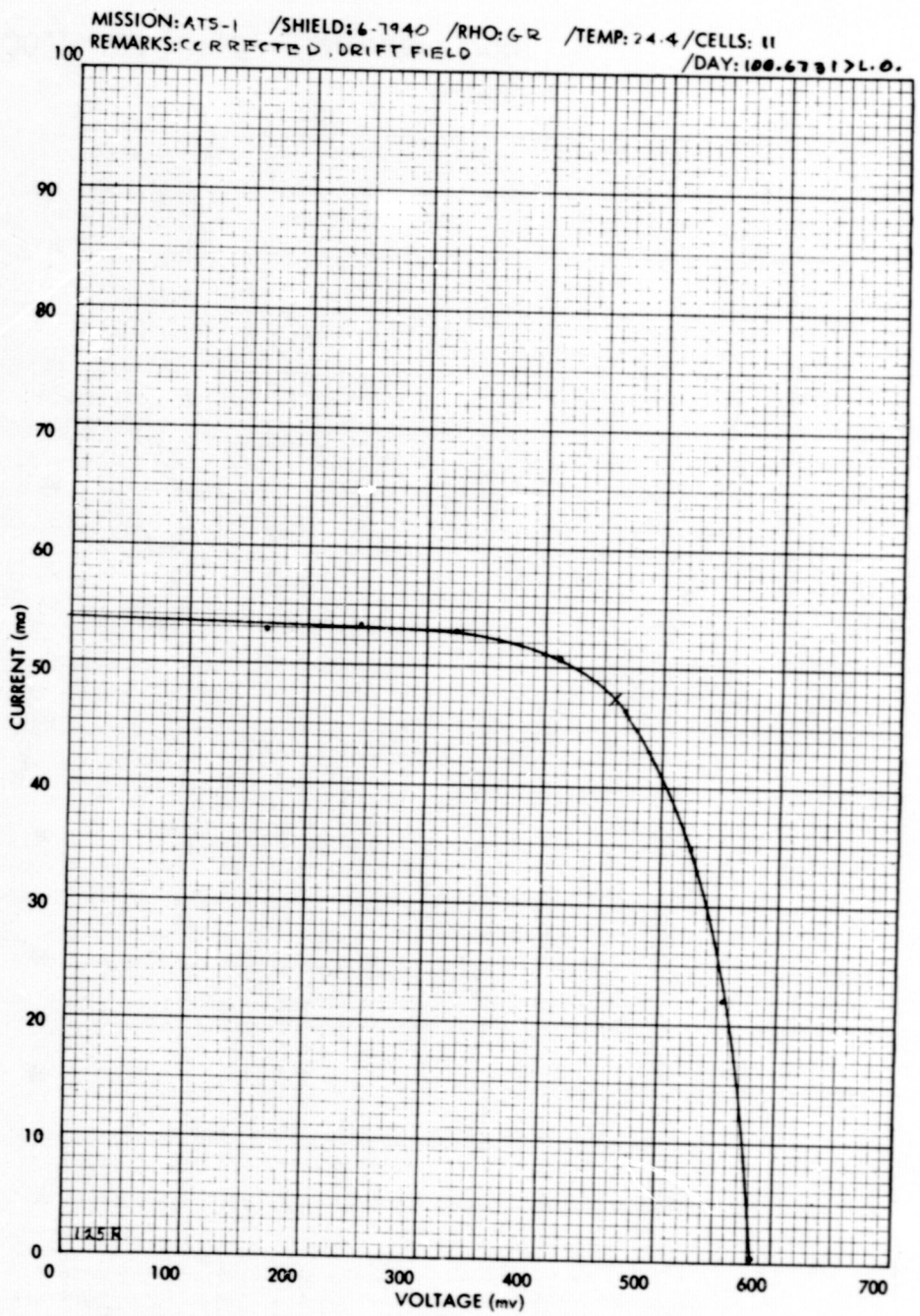
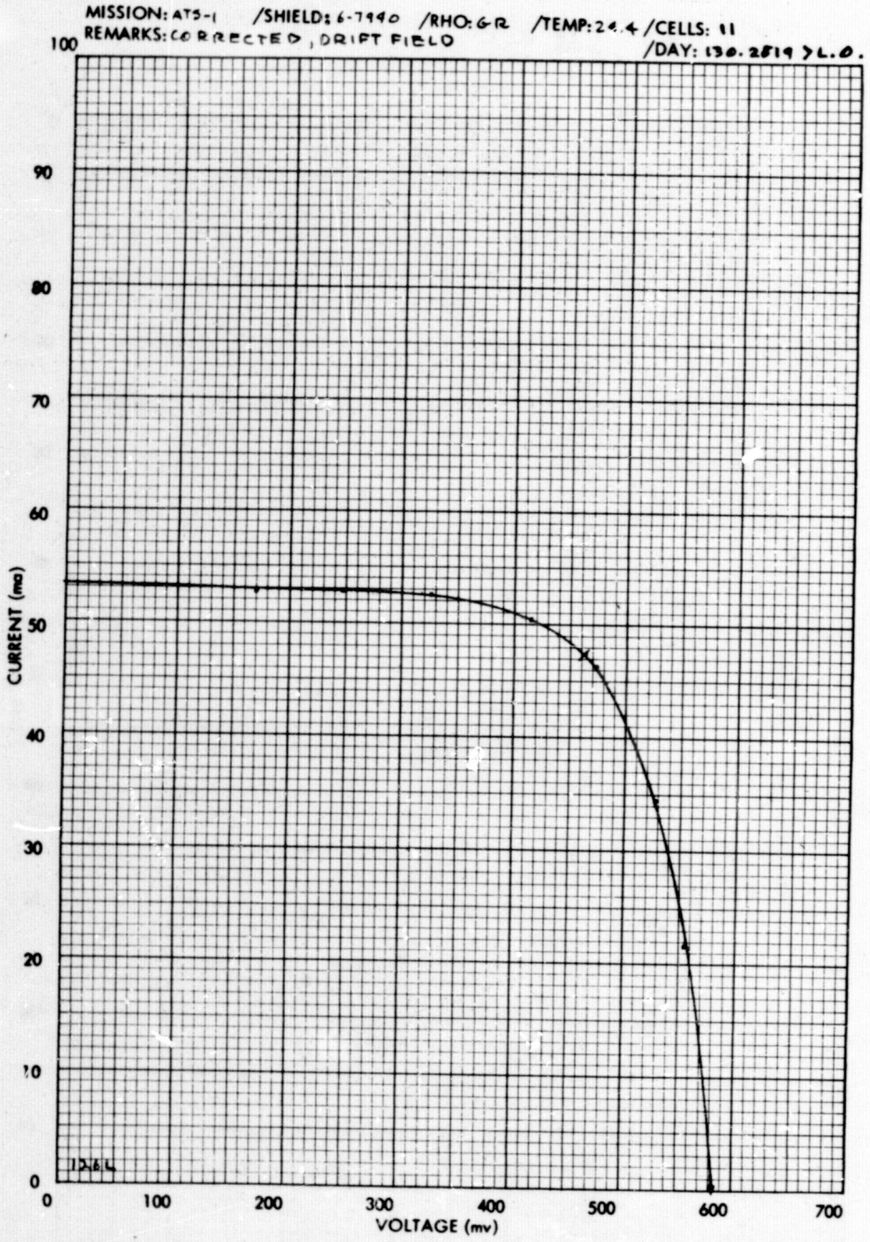


Figure 125. Cell 11, Days 60.6 and 100.6. Corrected Data



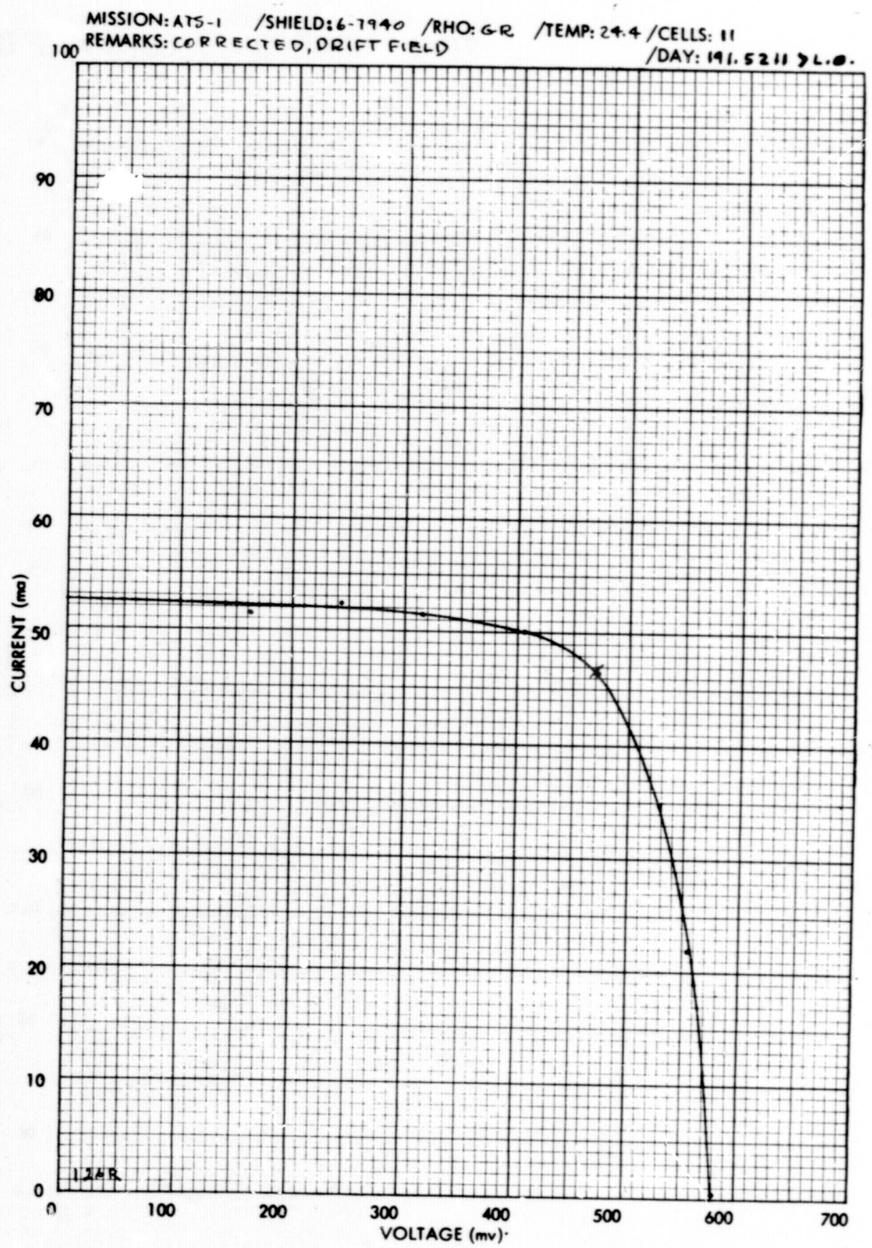


Figure 126. Cell 11, Days 130.2 and 191.5. Corrected Data

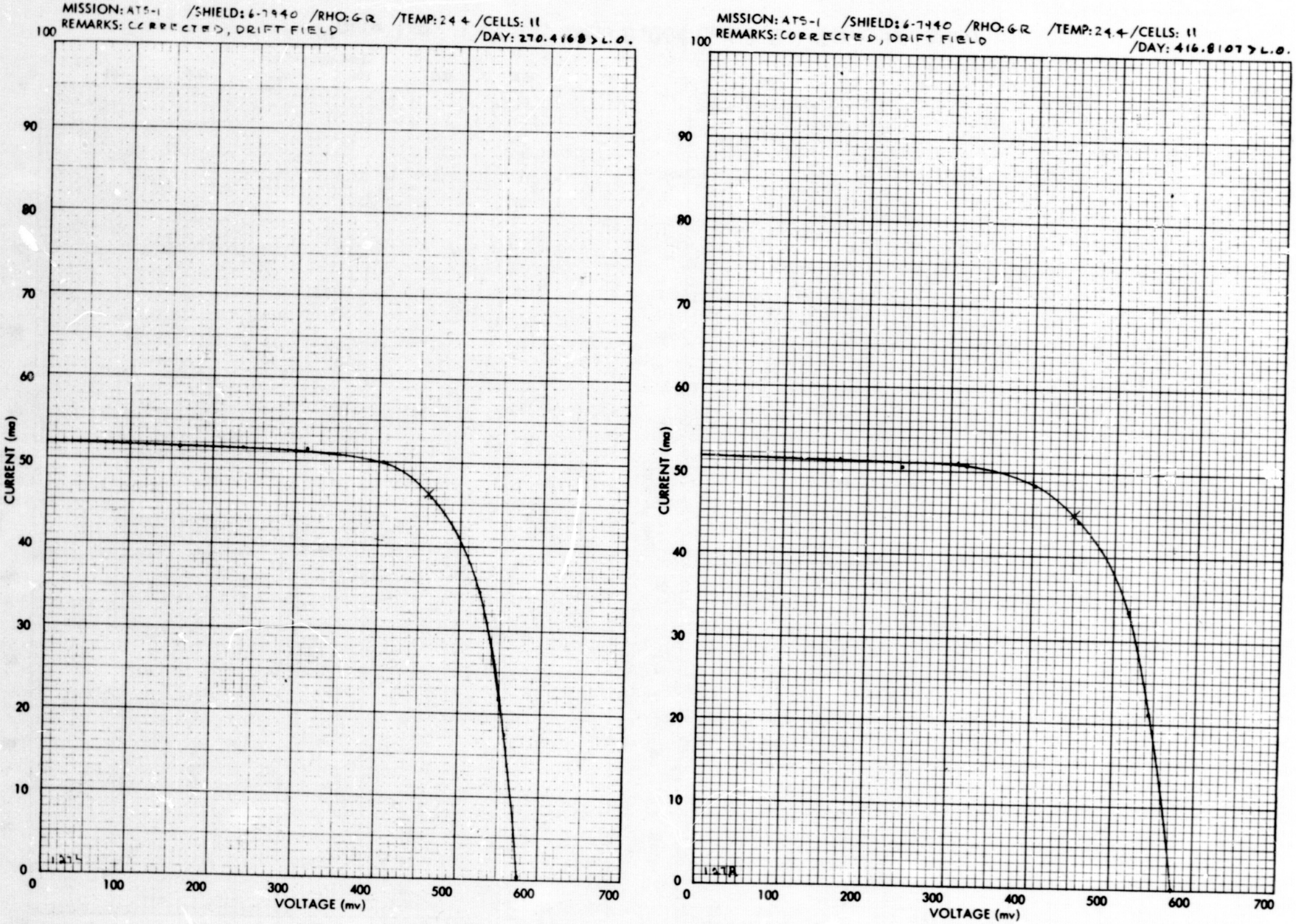
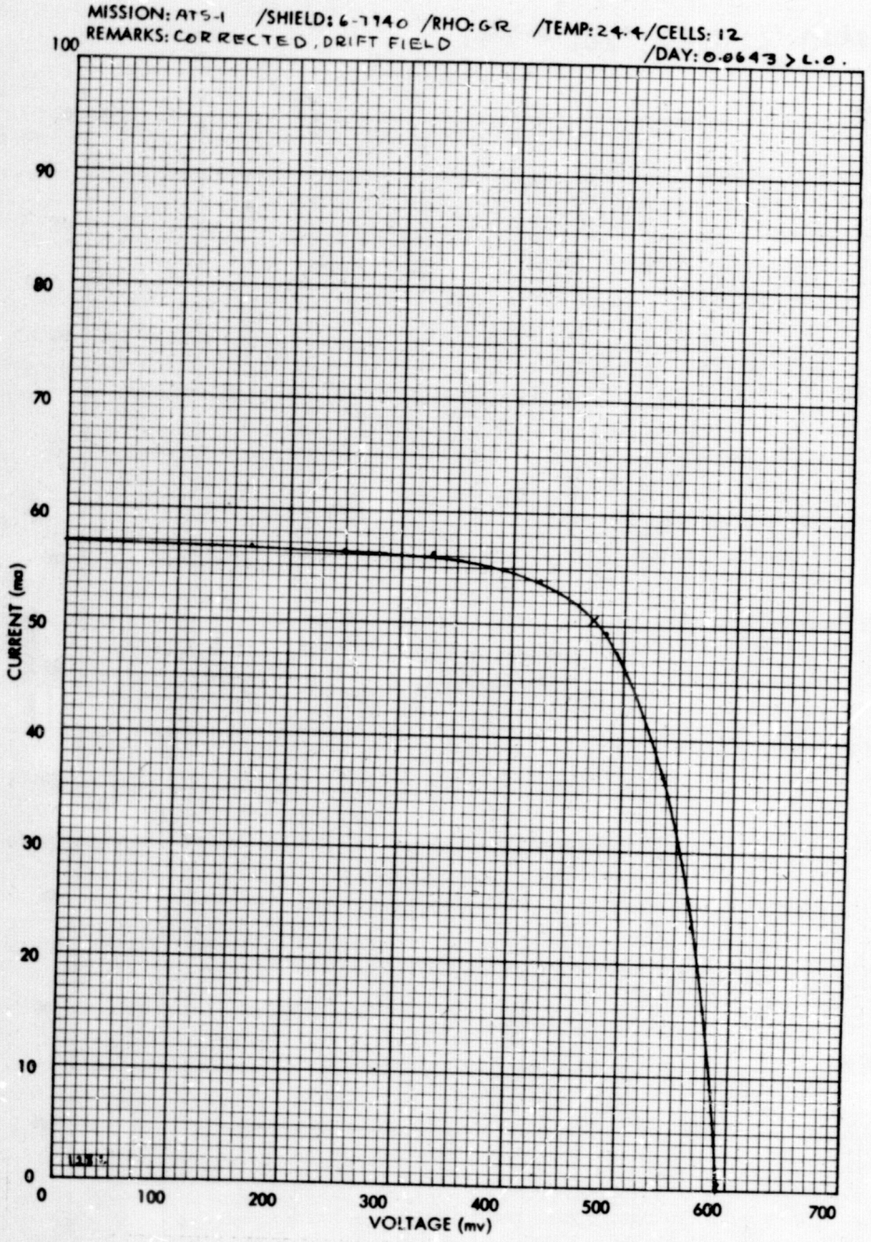


Figure 127. Cell 11, Days 270.4 and 416.8. Corrected Data



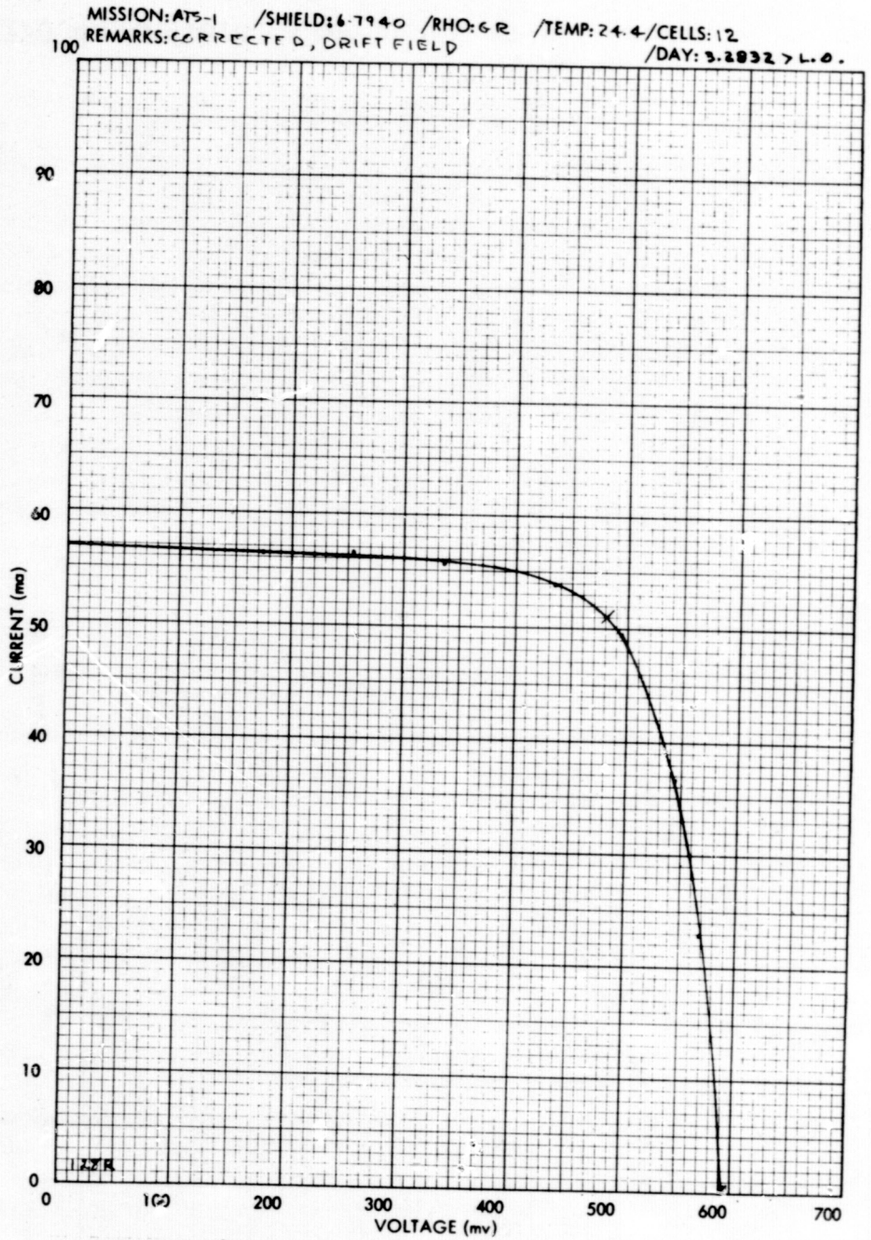
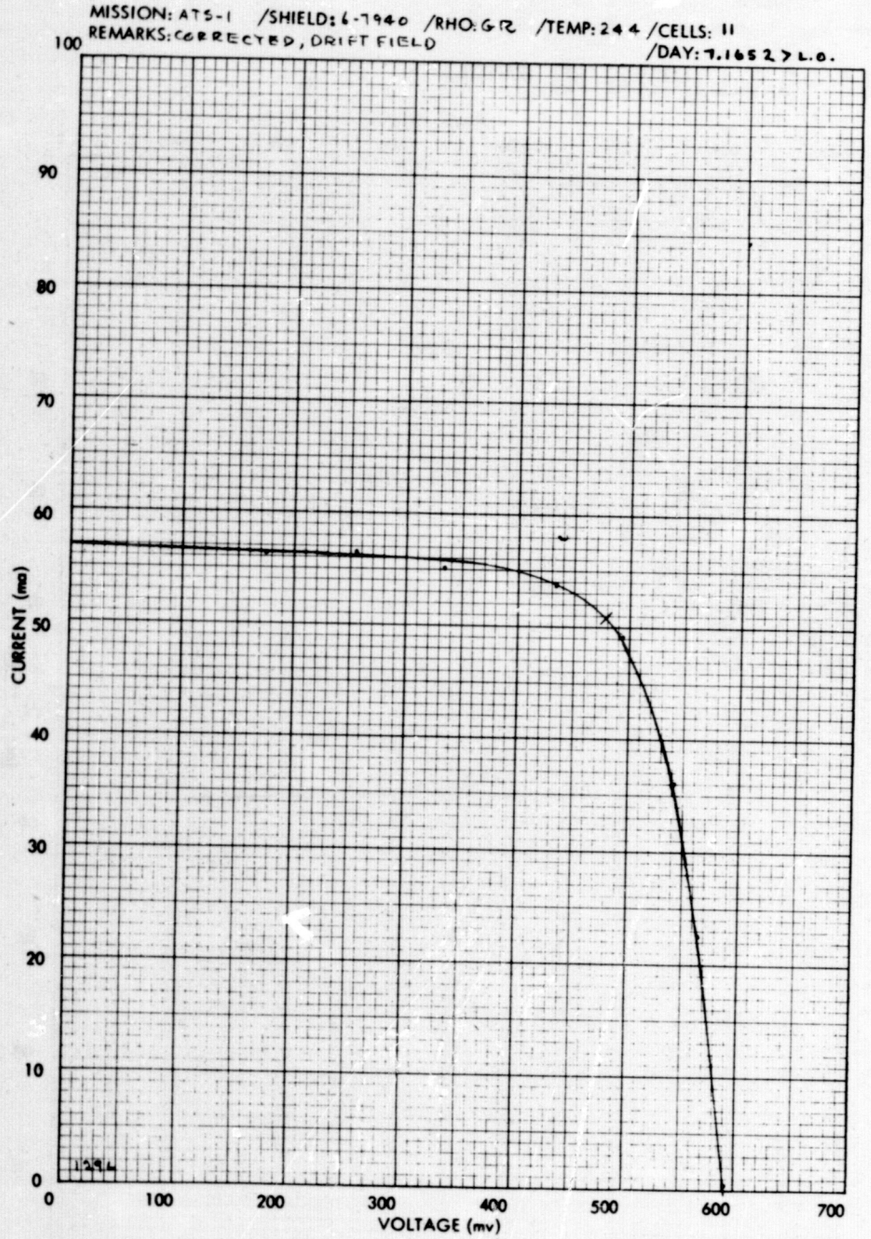
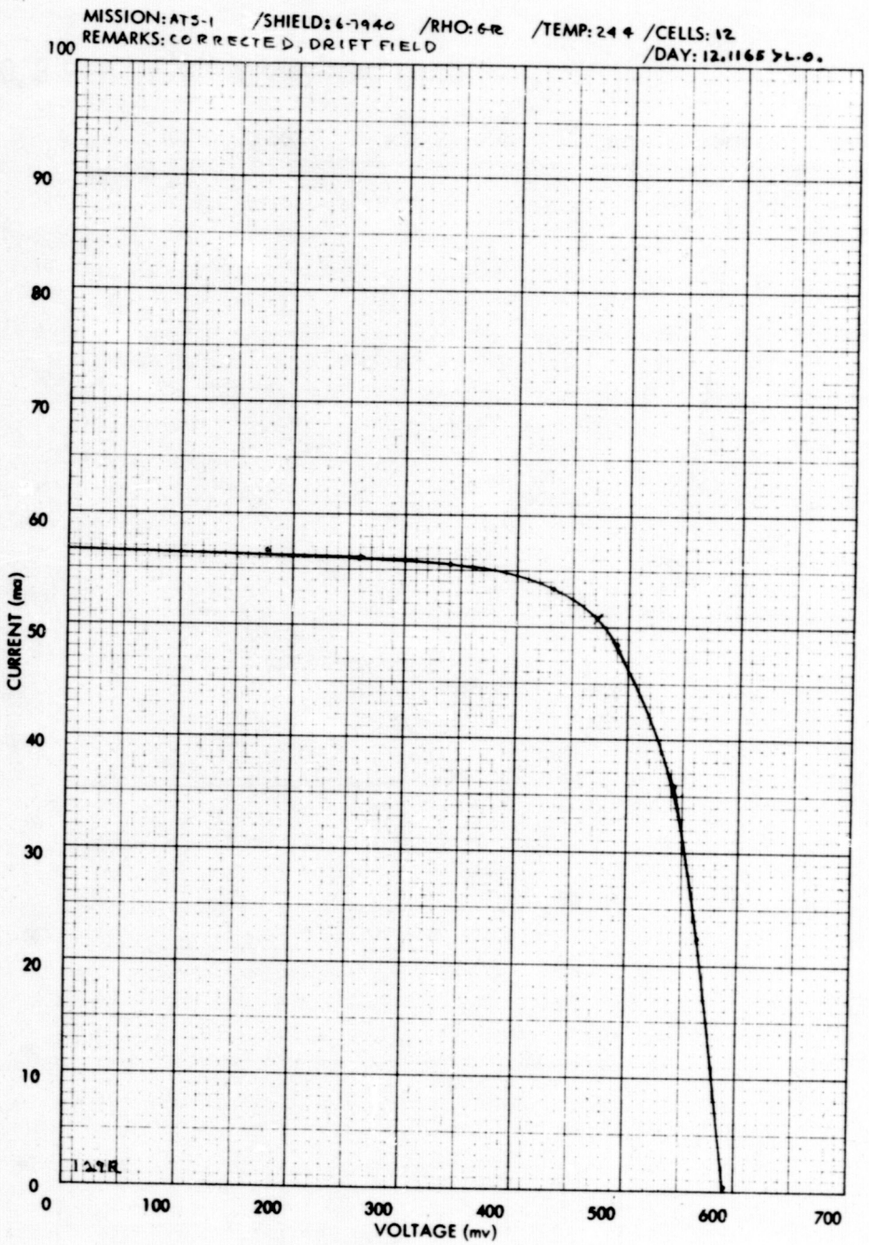


Figure 128. Cell 12, Days 0.064 and 3.2. Corrected Data





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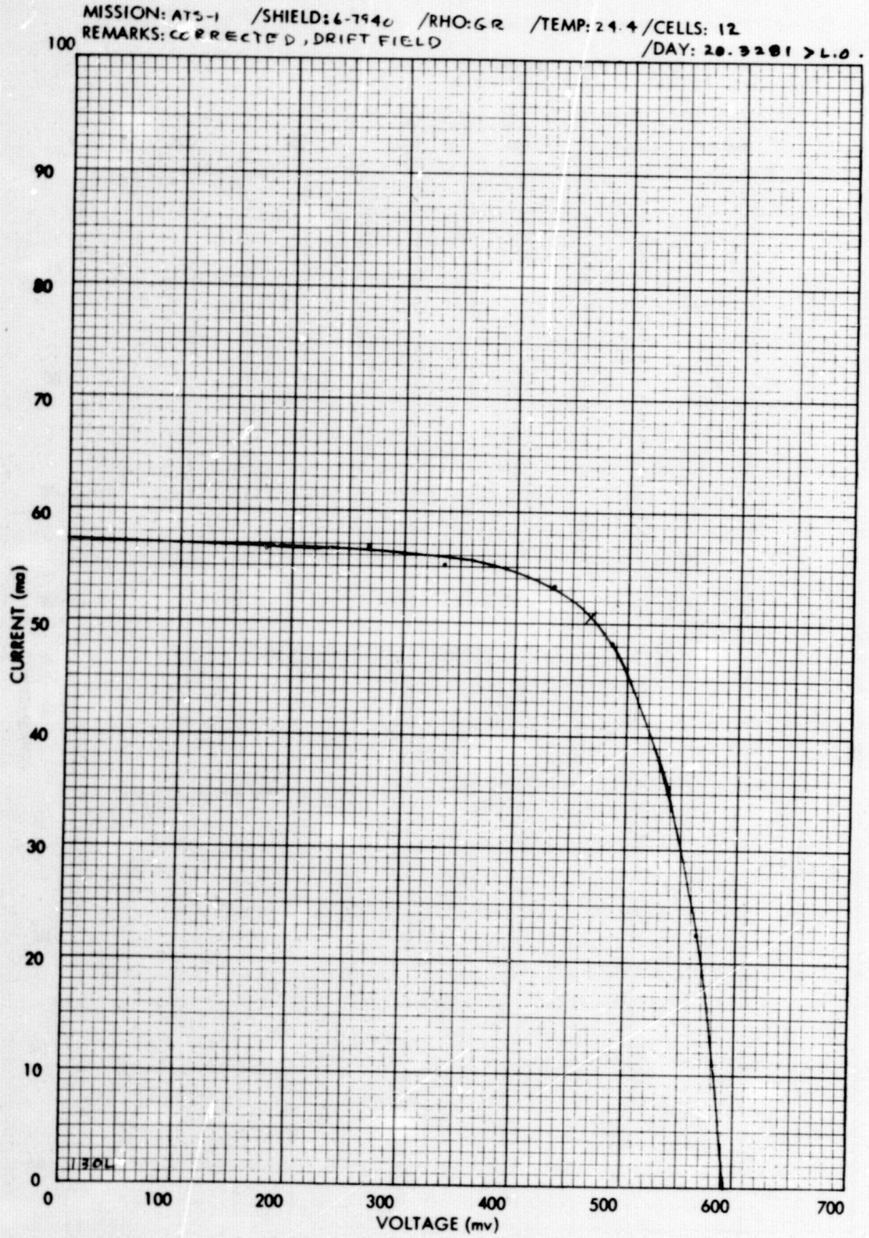


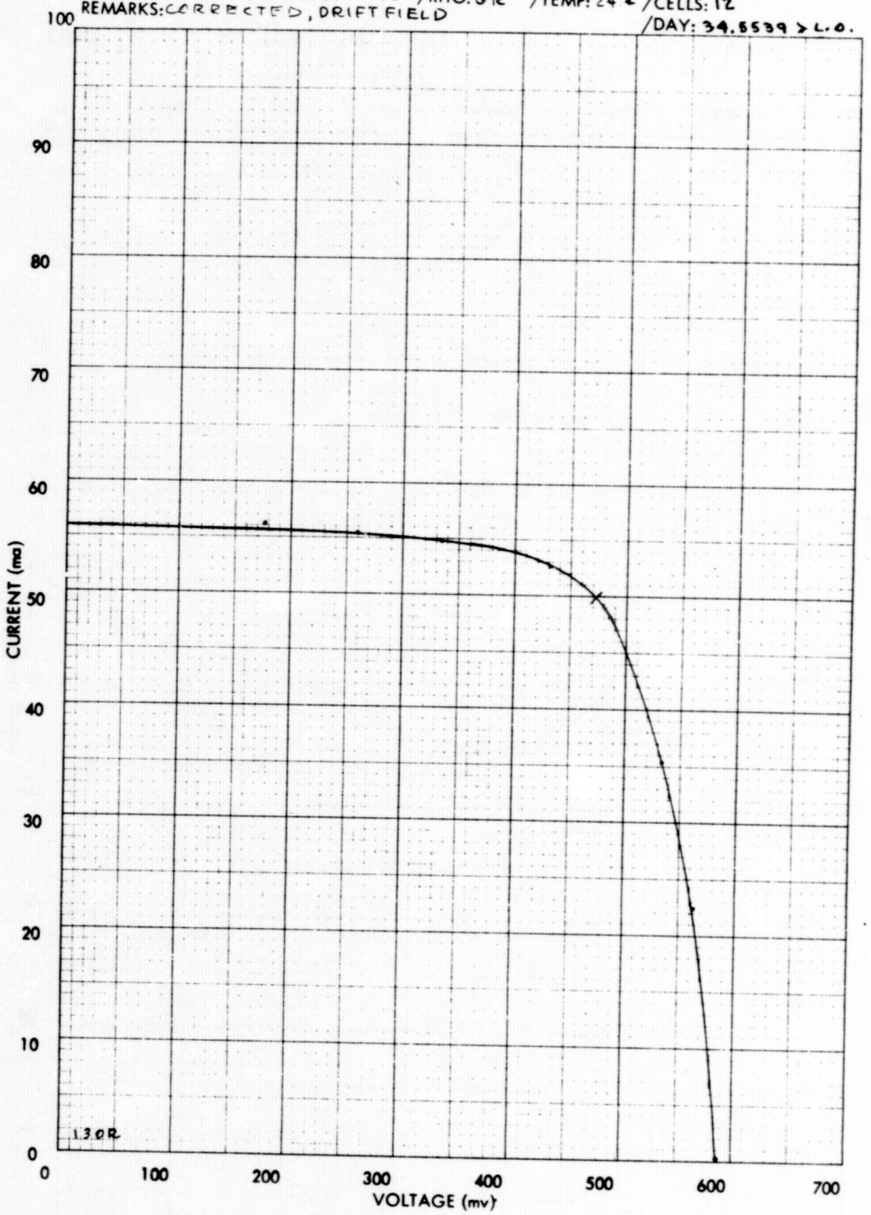
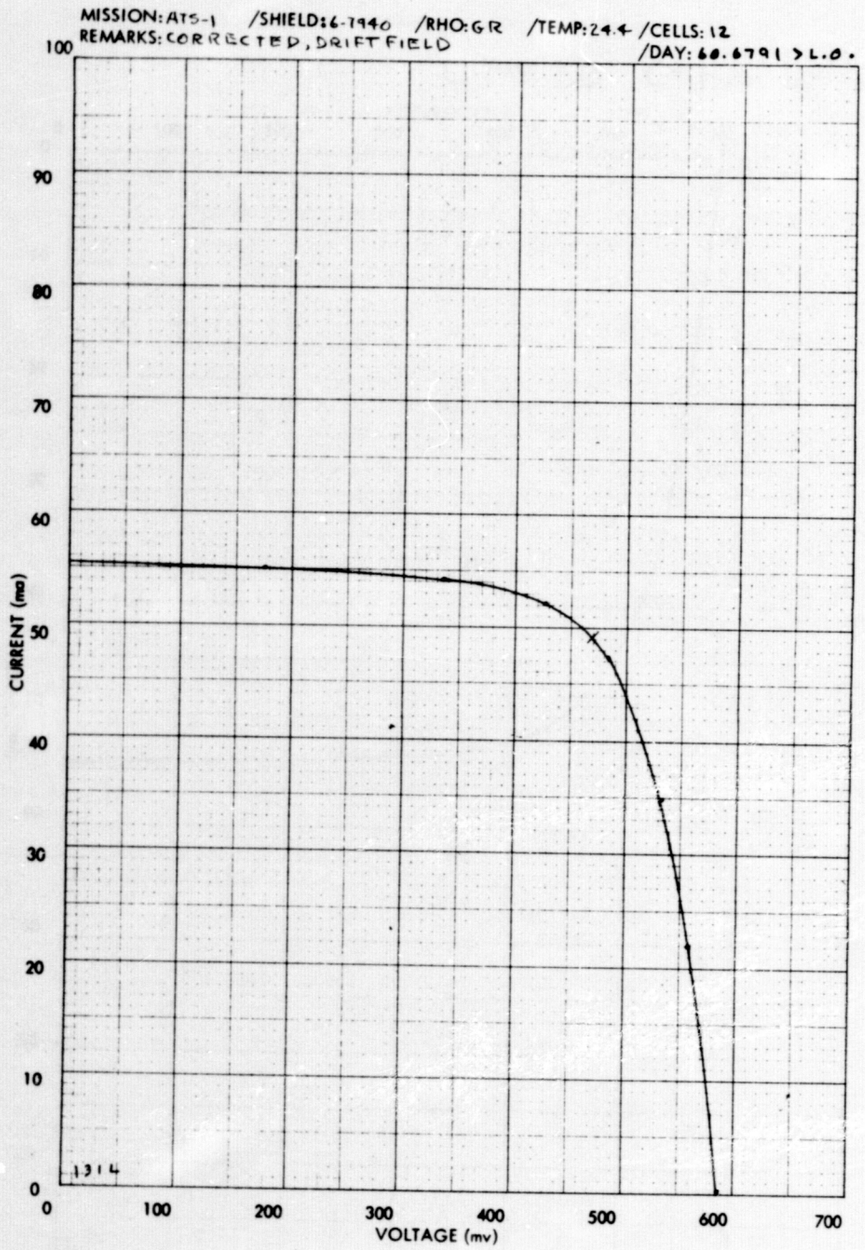


Figure 130. Cell 12, Days 20.3 and 34.5. Corrected Data



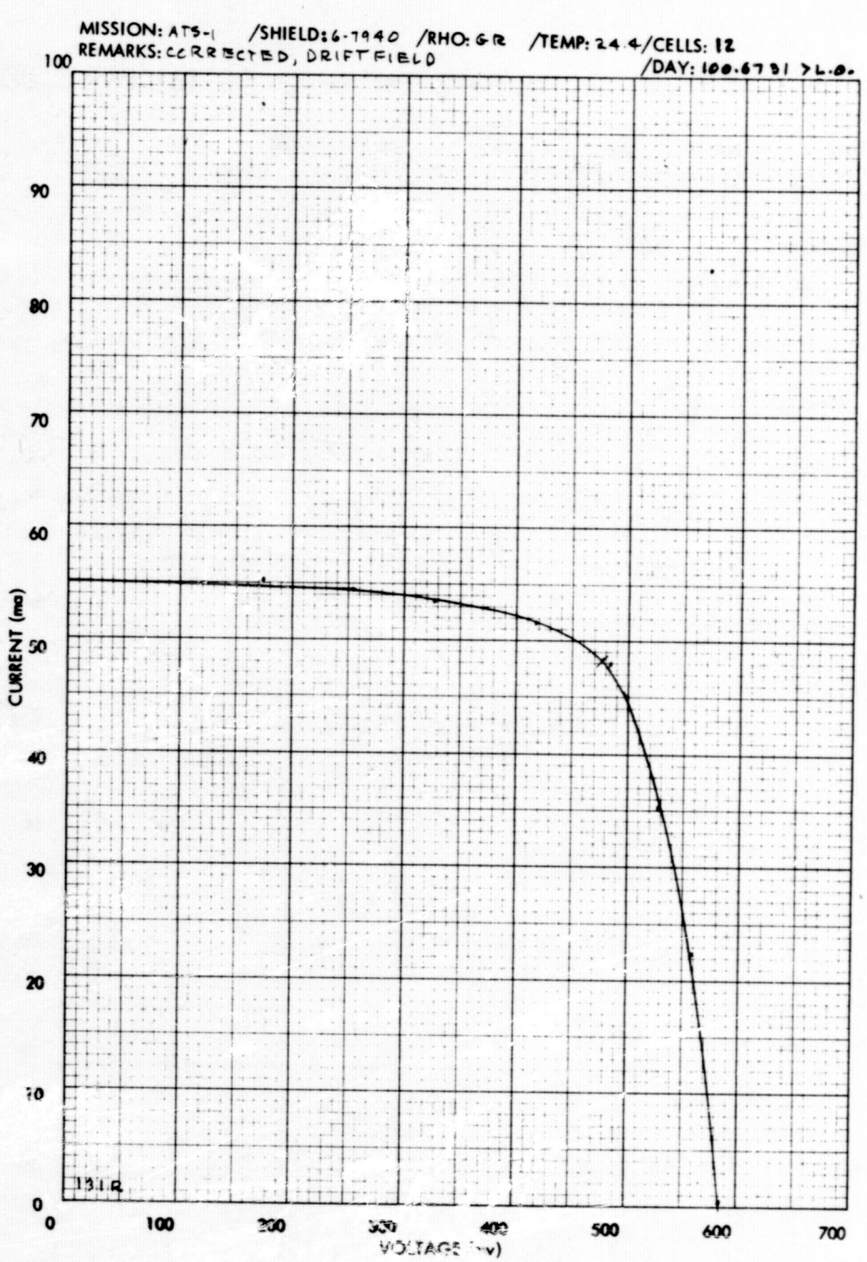
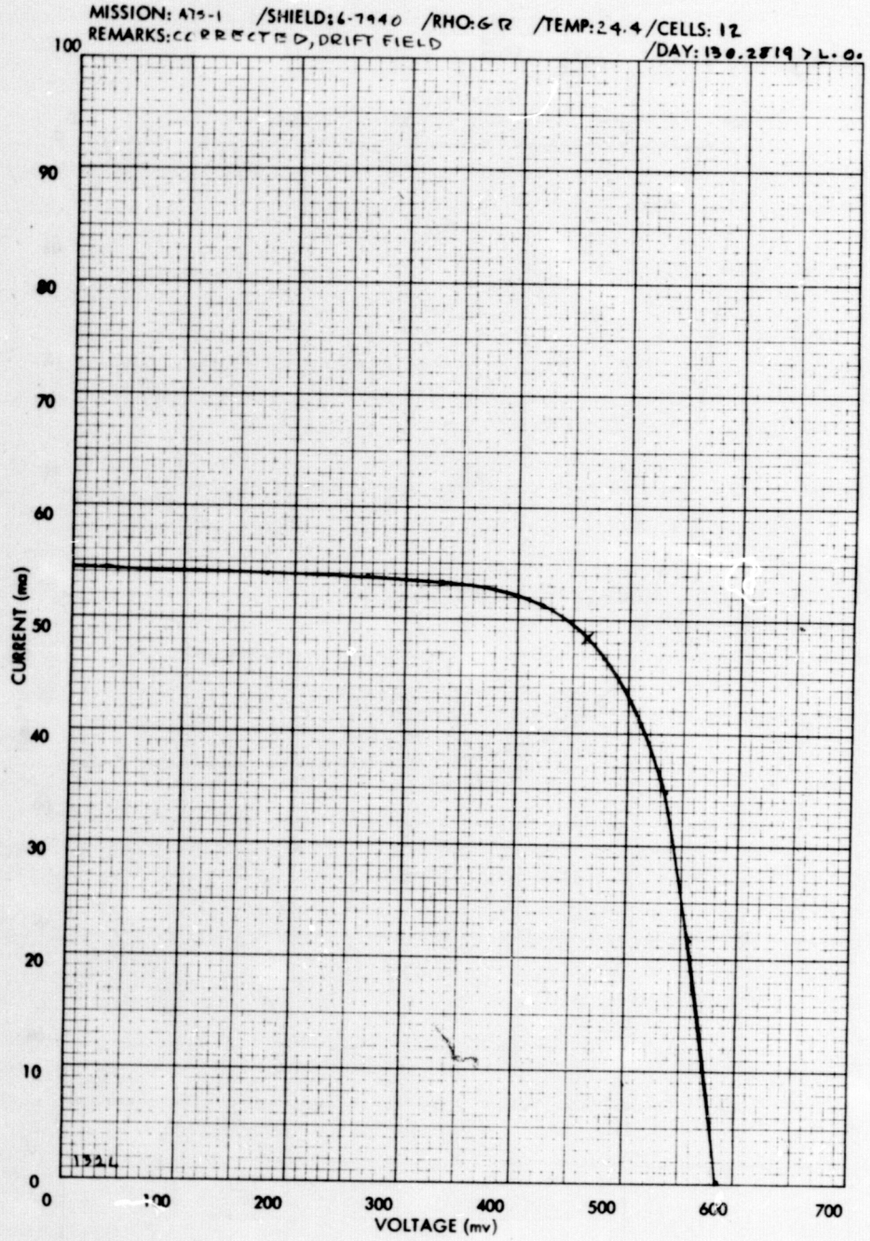


Figure 131. Cell 12, Days 60.6 and 100.6. Corrected Data



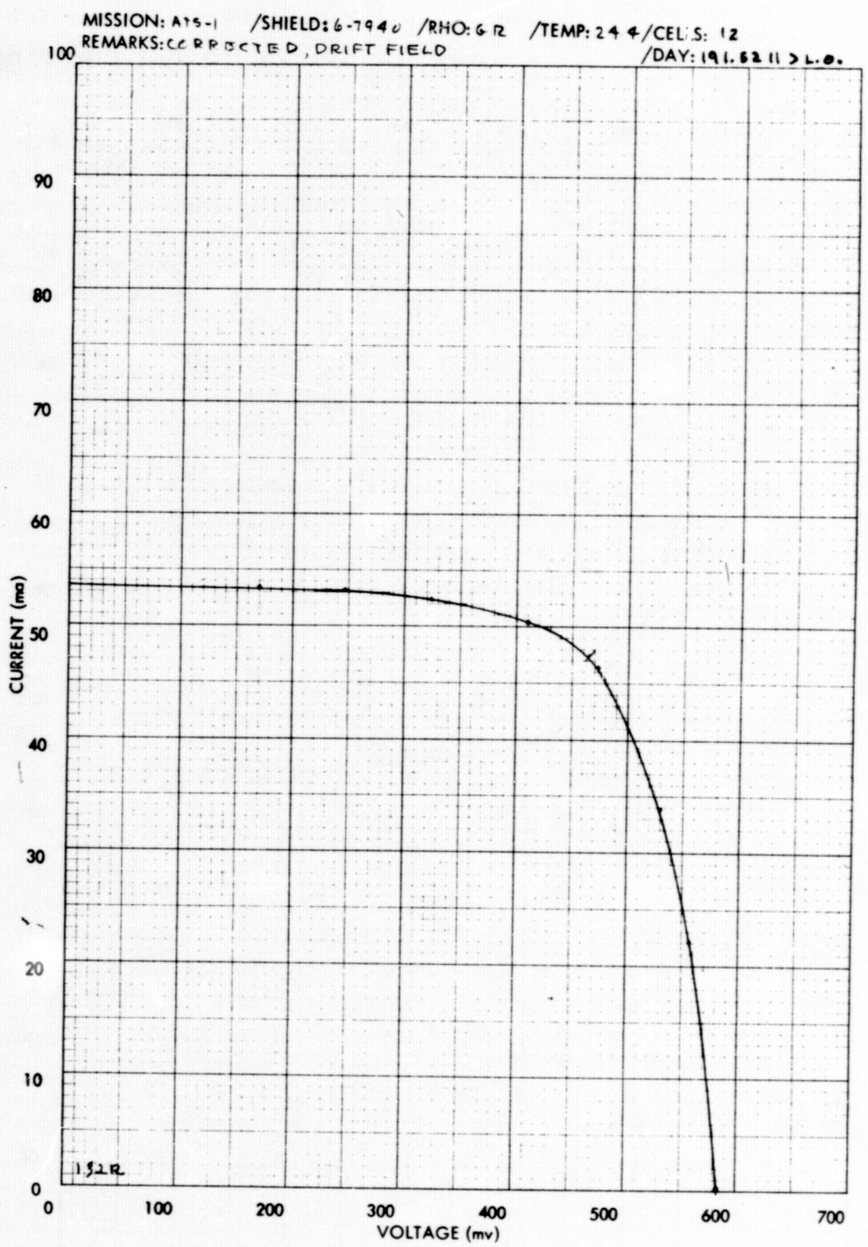
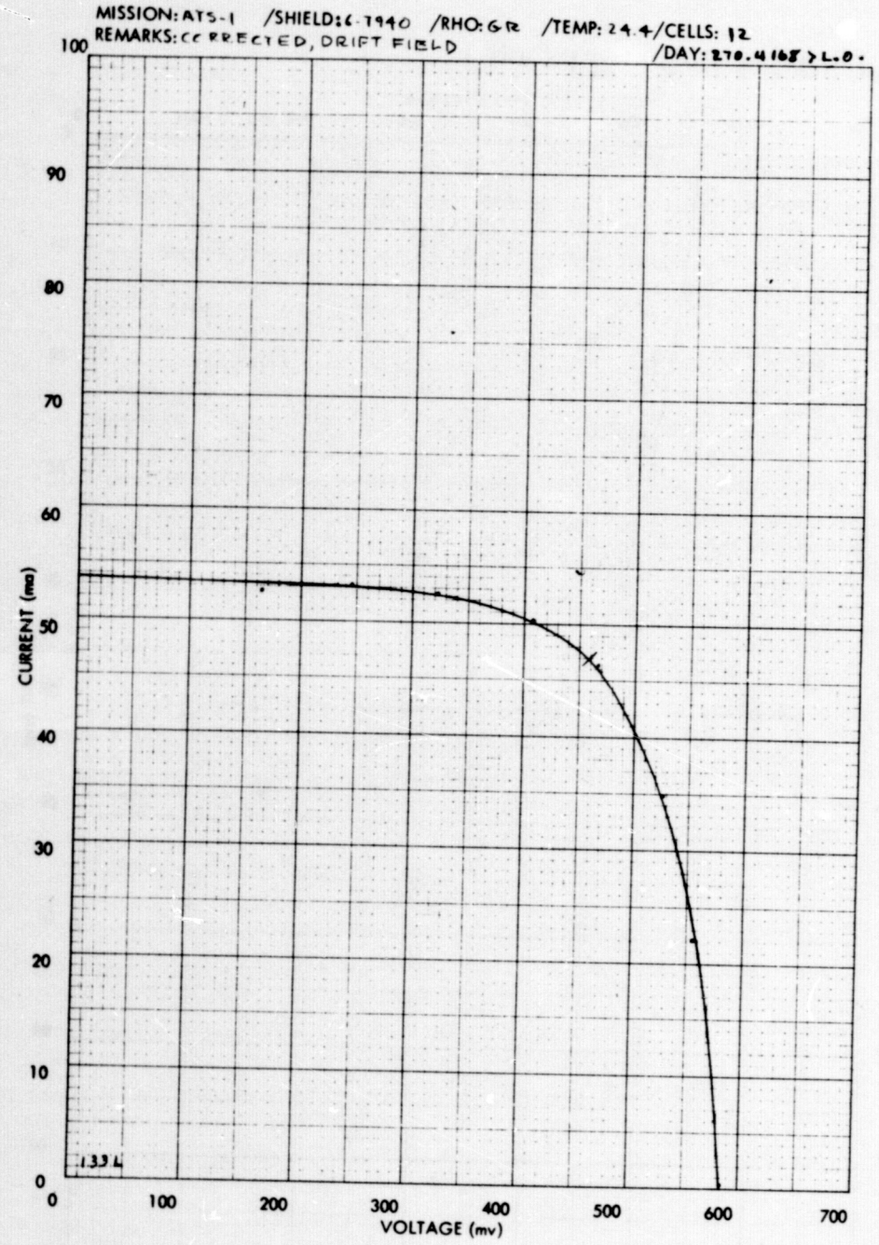


Figure 132. Cell 12, Days 130.2 and 191.5. Corrected Data



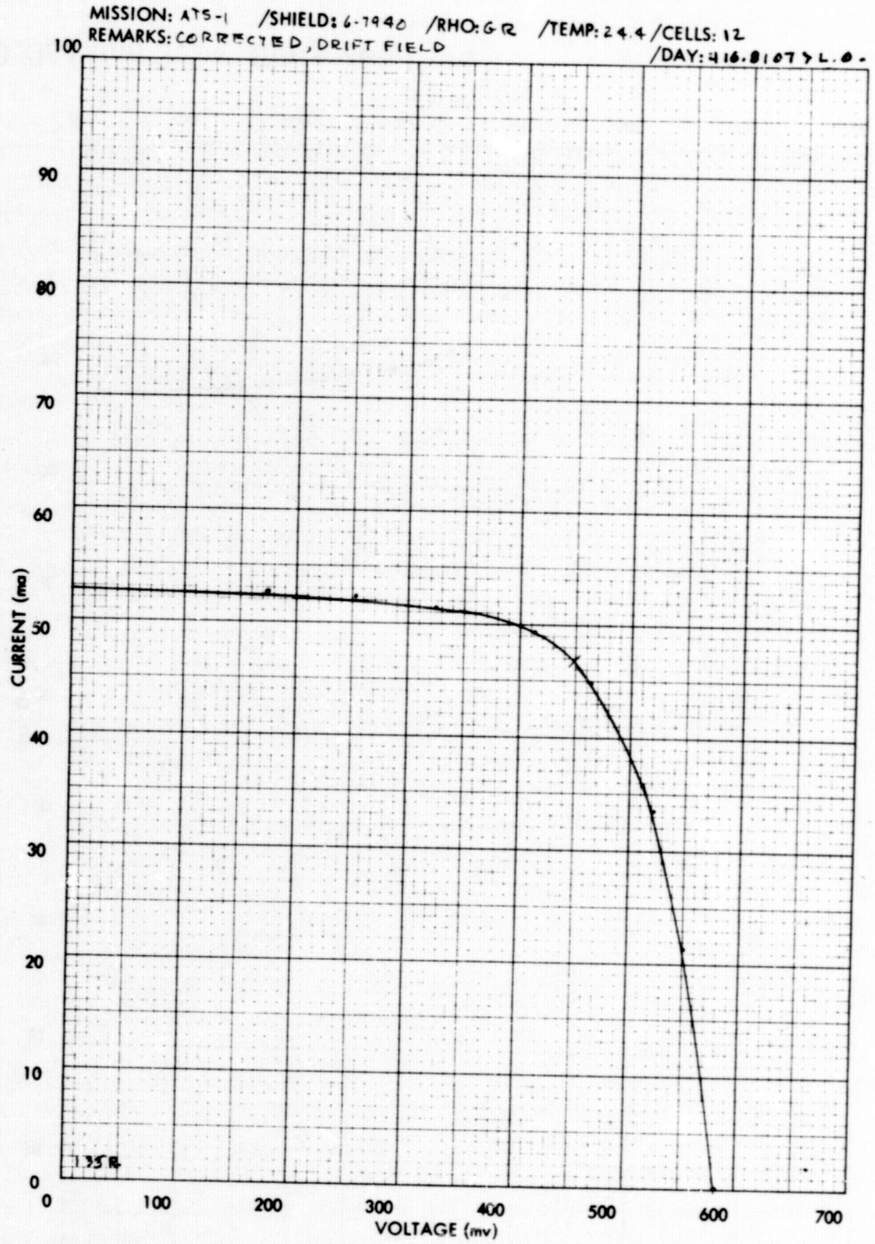


Figure 133. Cell 12, Days 270.4 and 416.8. Corrected Data

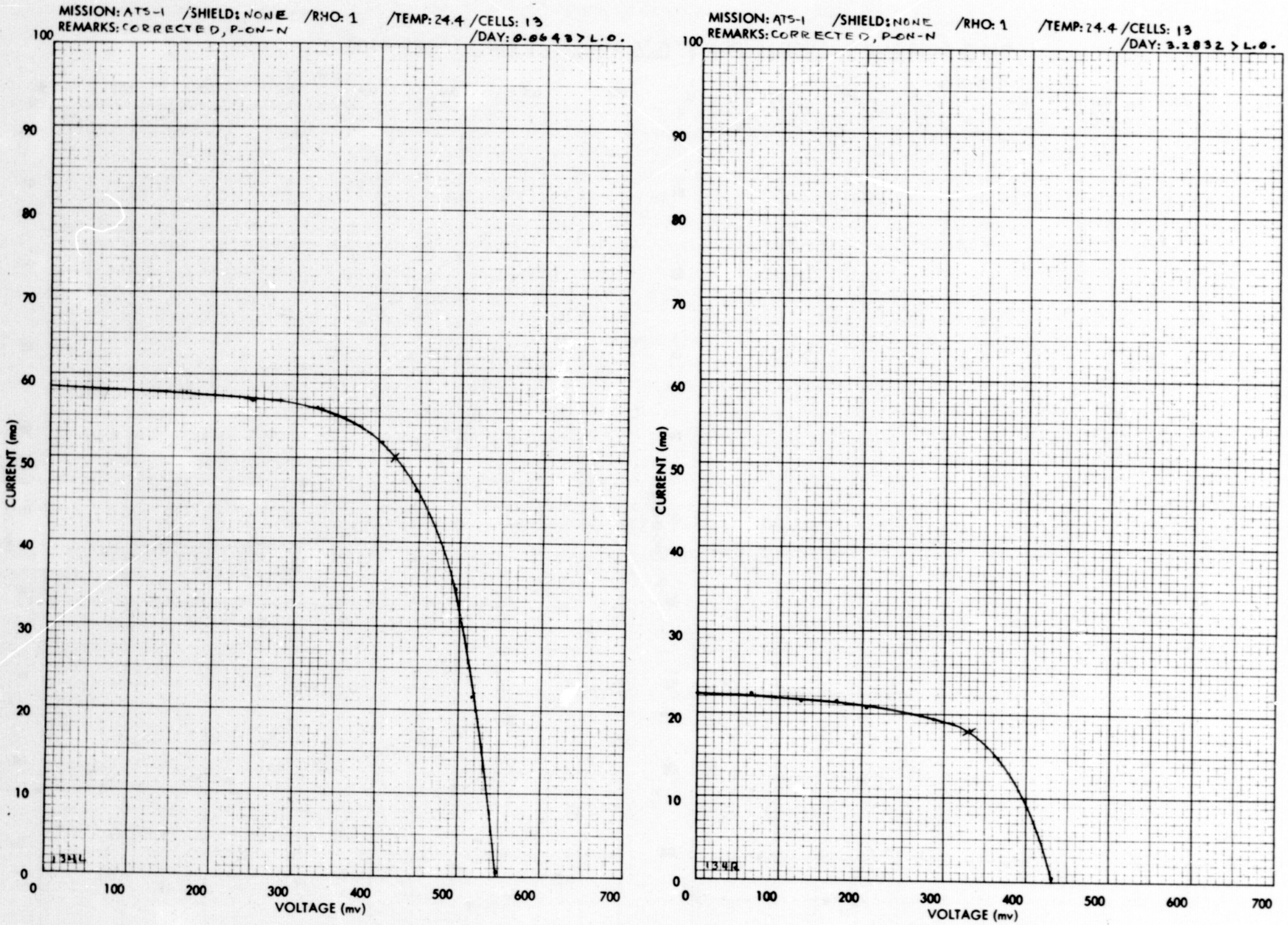
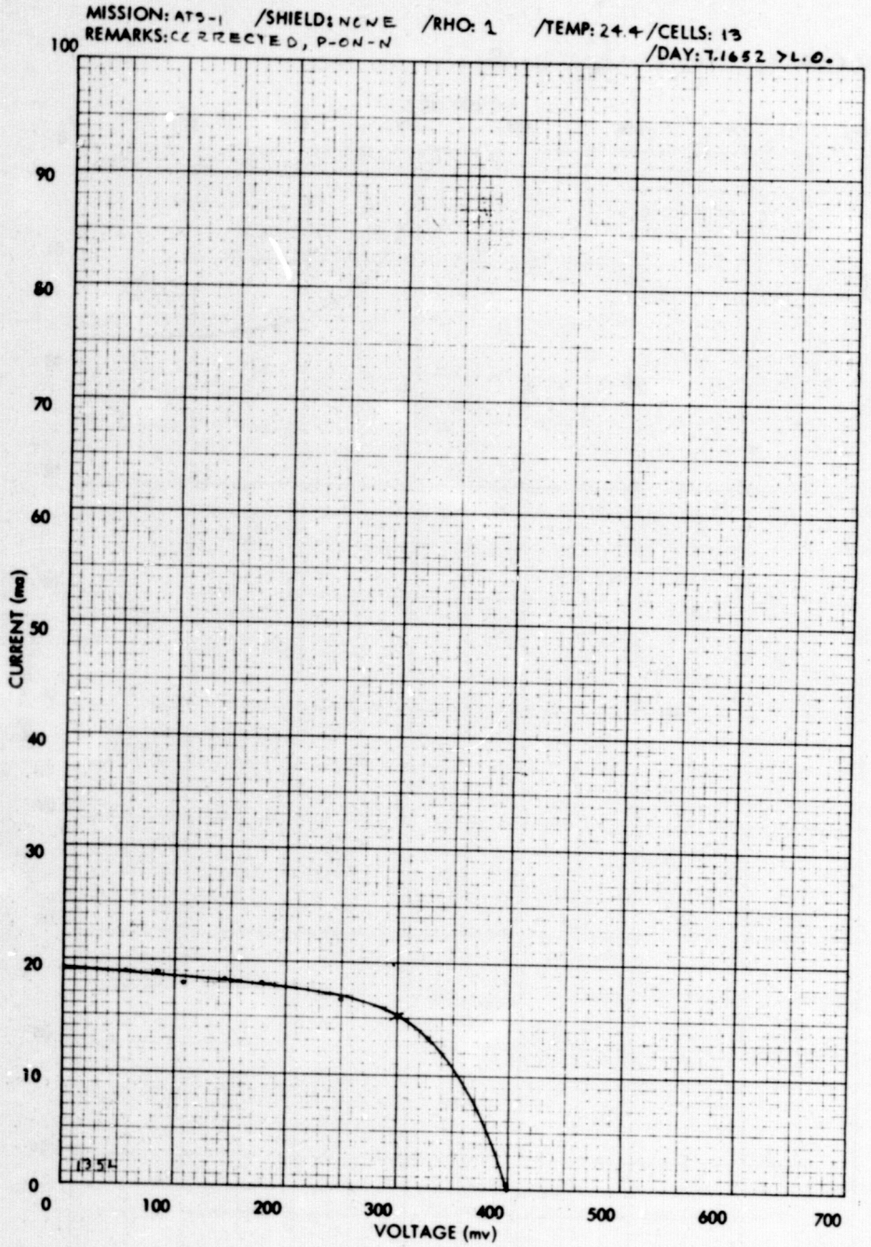


Figure 134. Cell 13, Days 0.064 and 3.2. Corrected Data



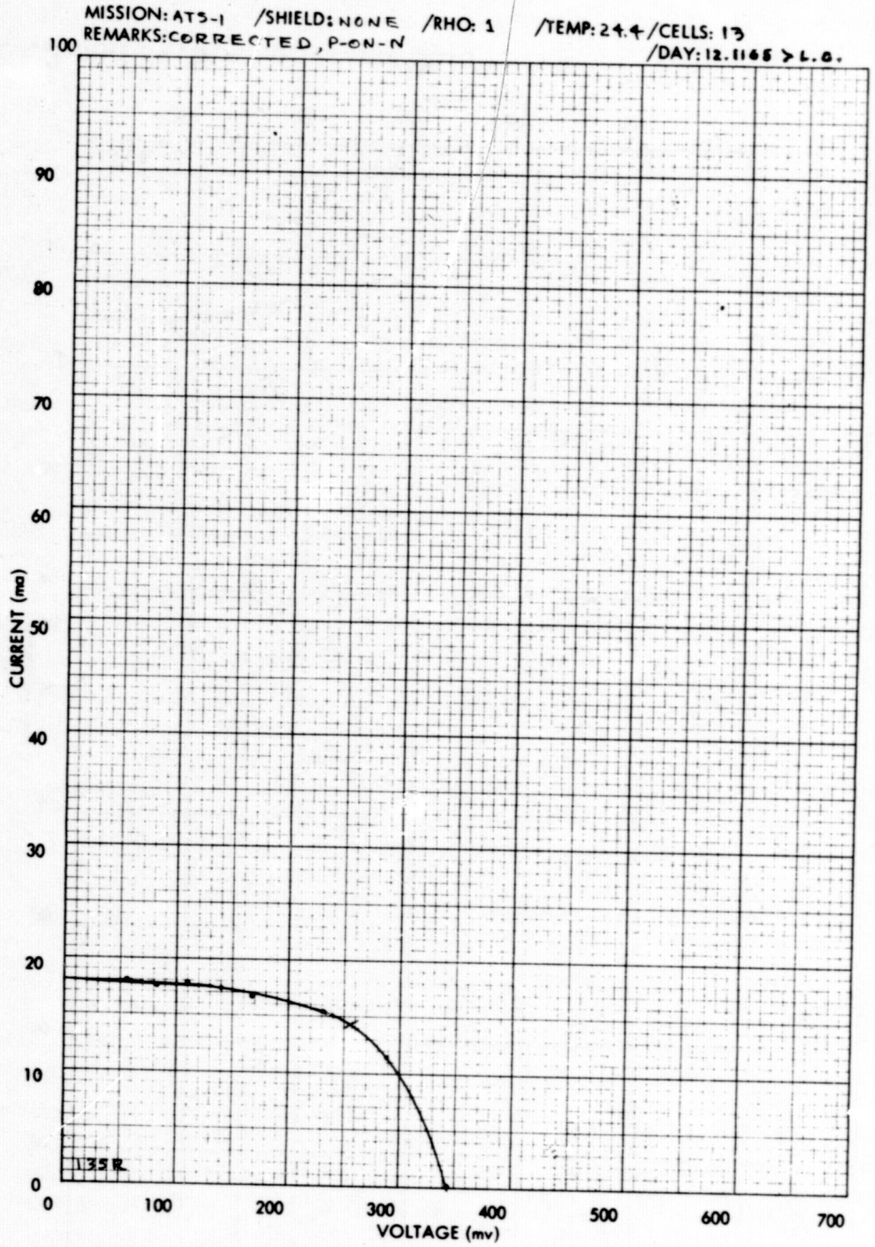
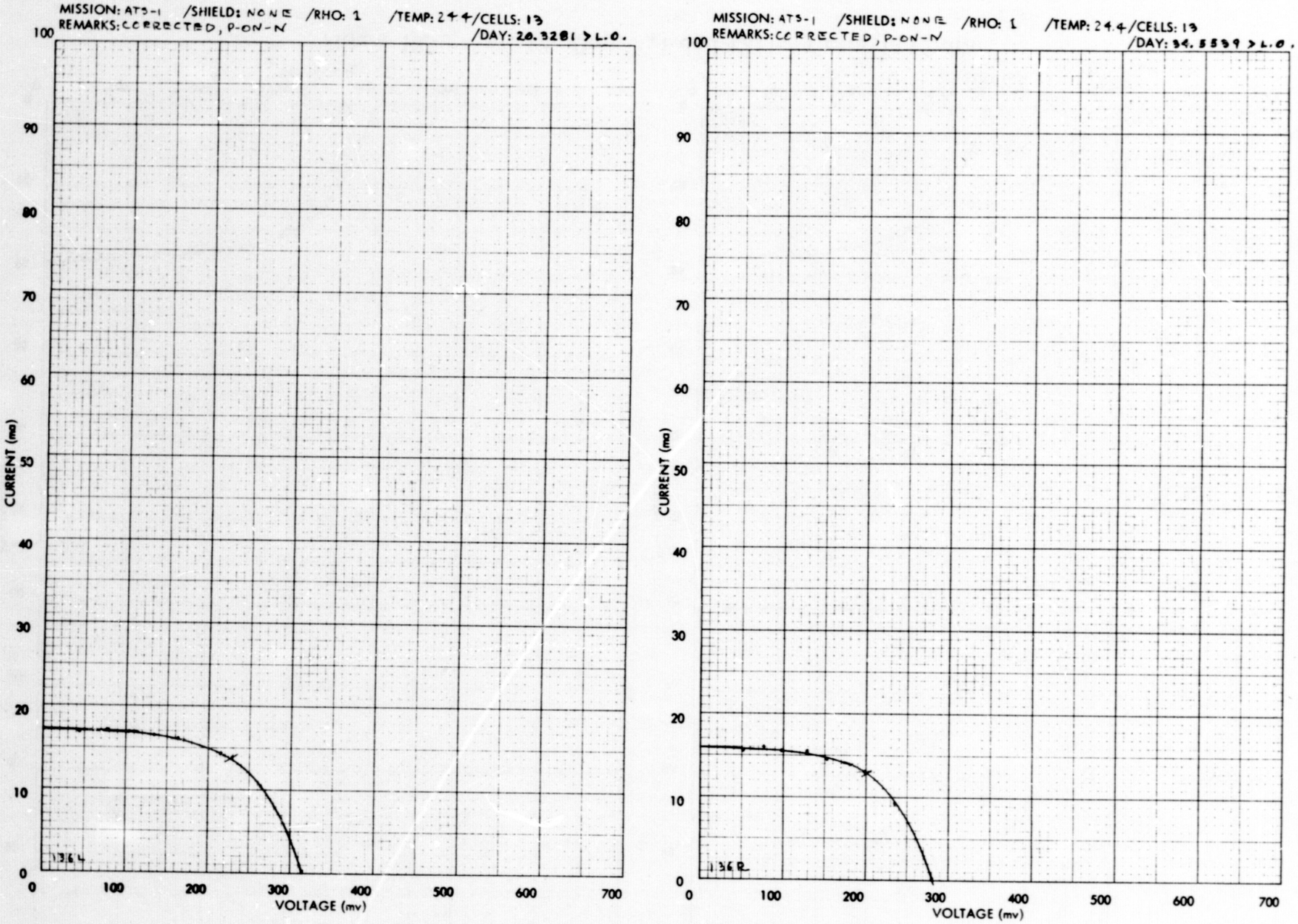


Figure 135. Cell 13, Days 7.1 and 12.1. Corrected Data



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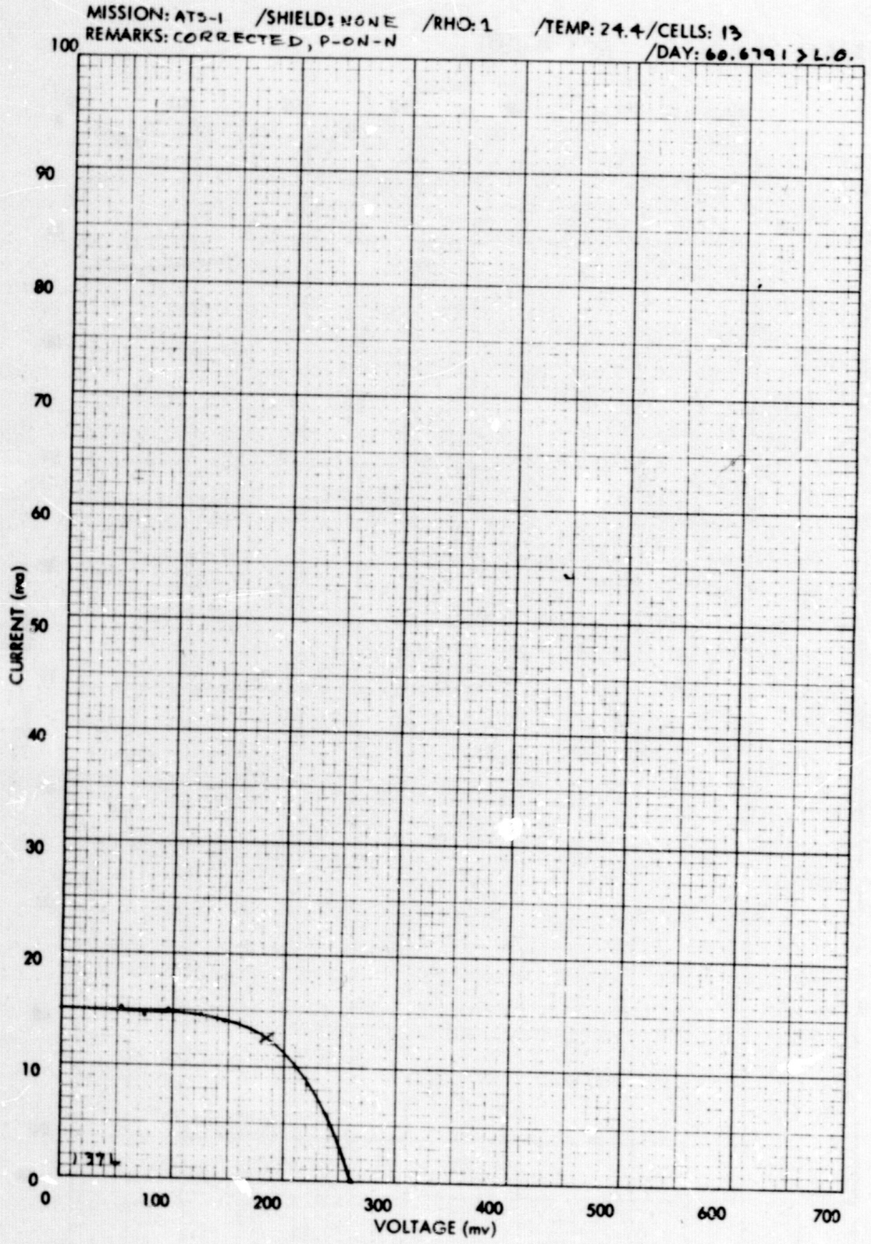


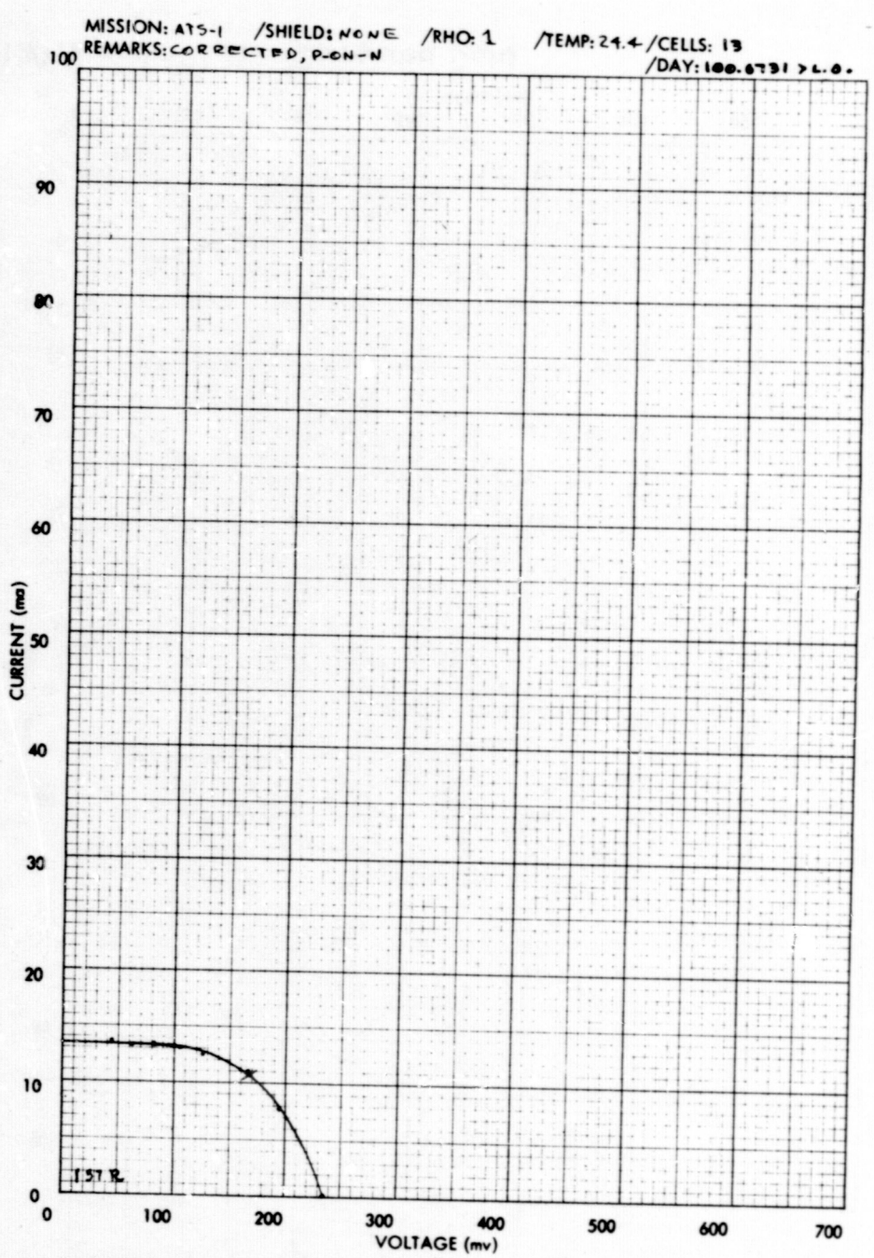
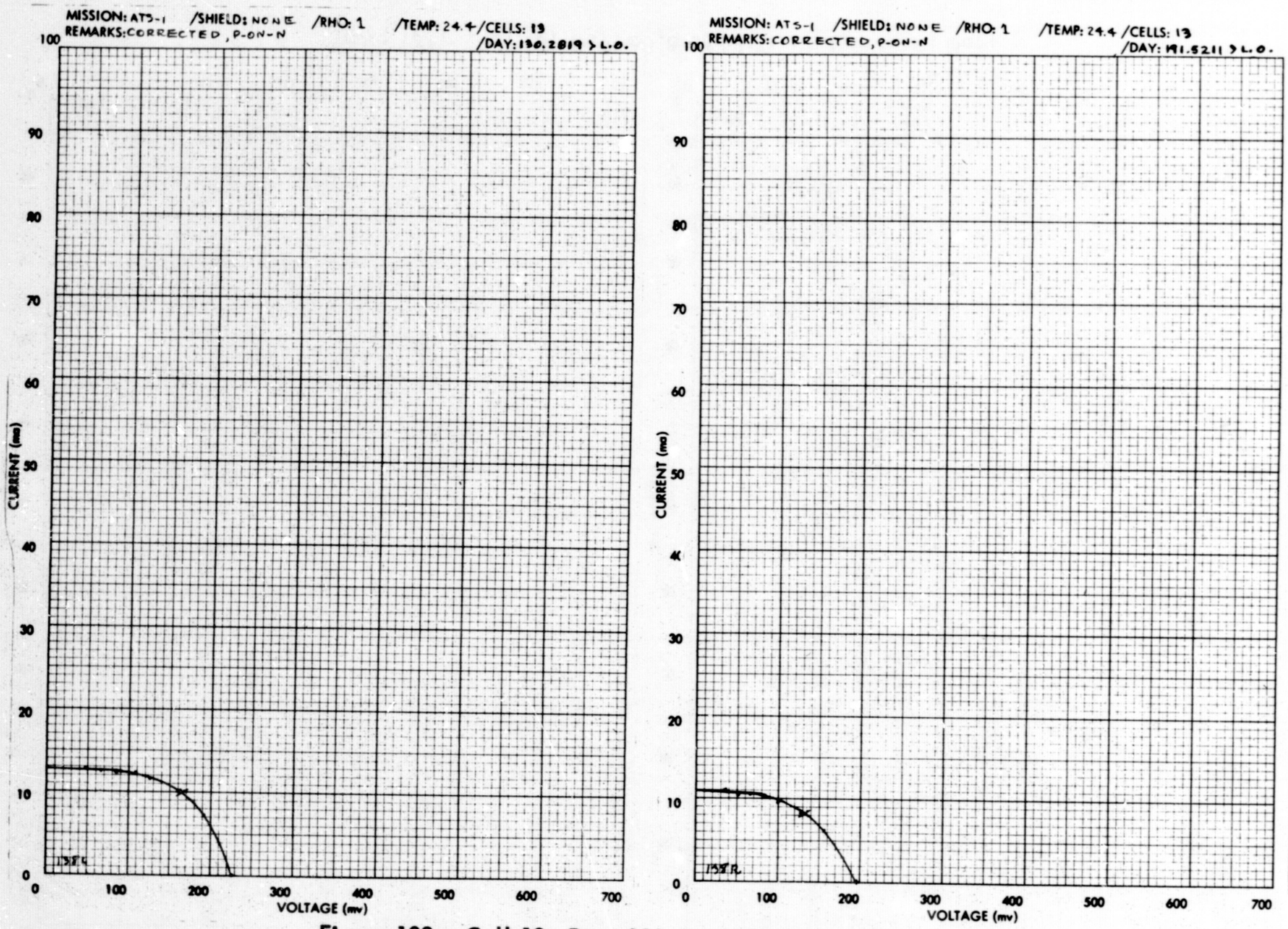


Figure 137. Cell 13, Days 60.6 and 100.6. Corrected Data



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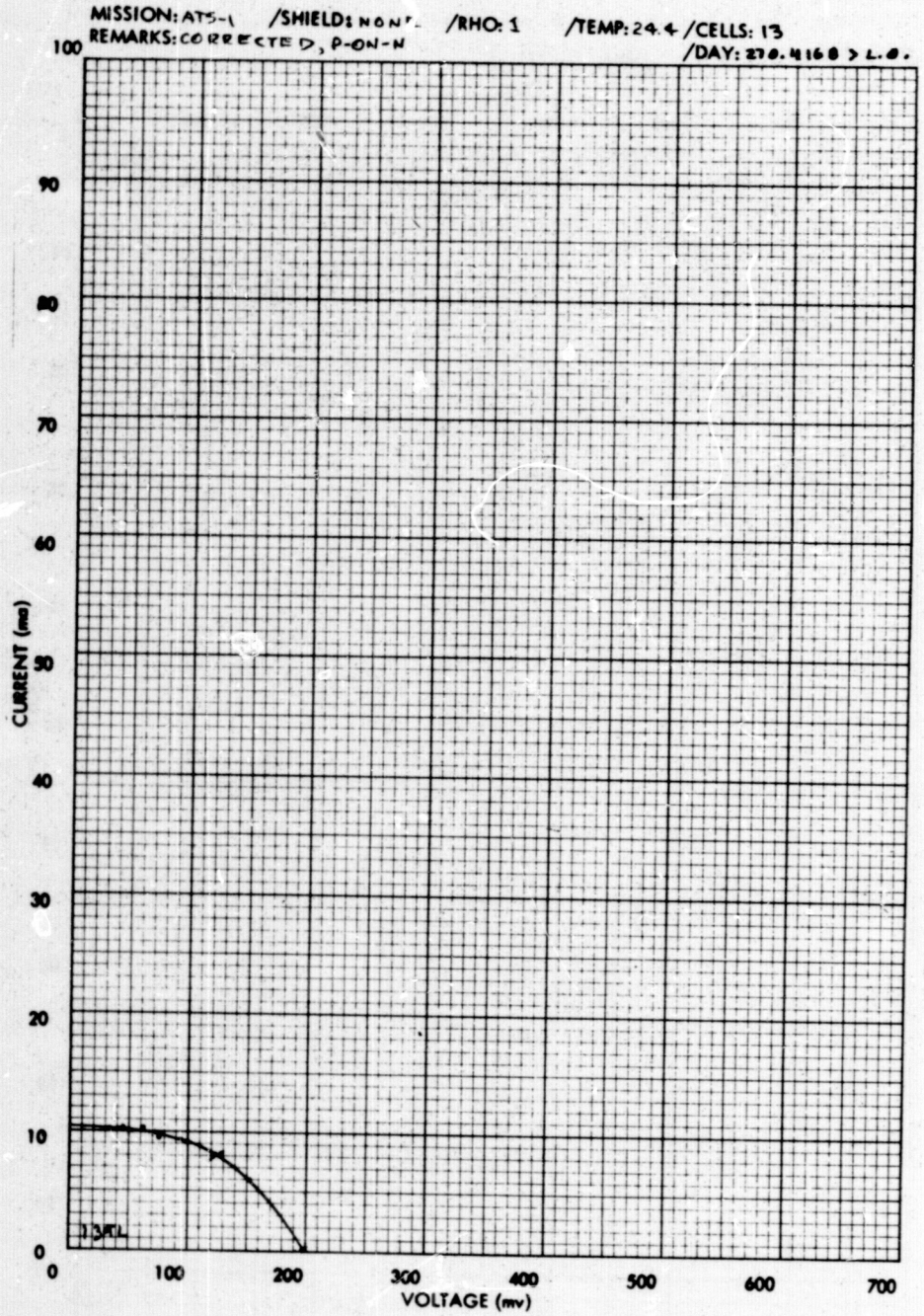


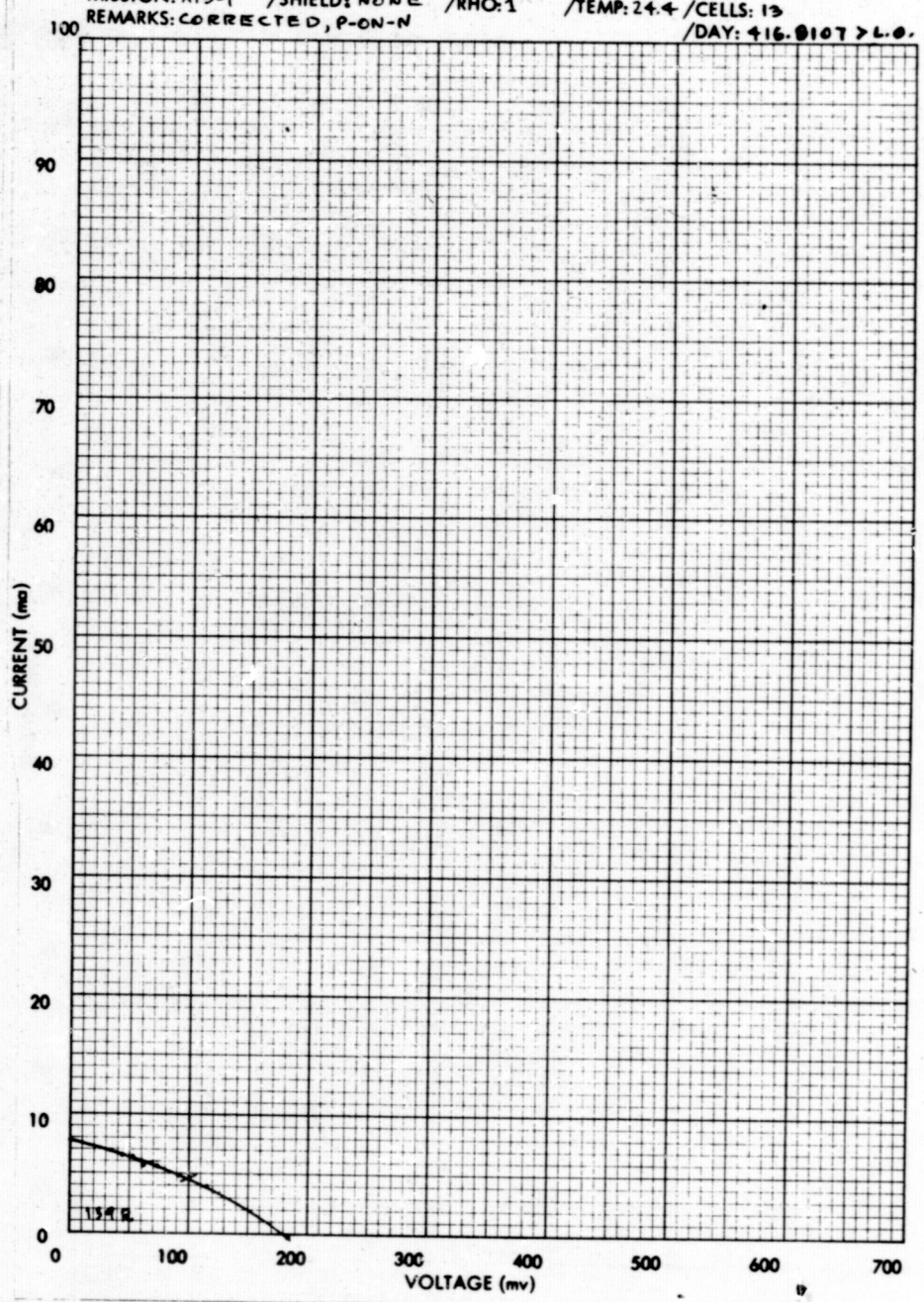


Figure 139. Cell 13, Days 270.4 and 416.8. Corrected Data

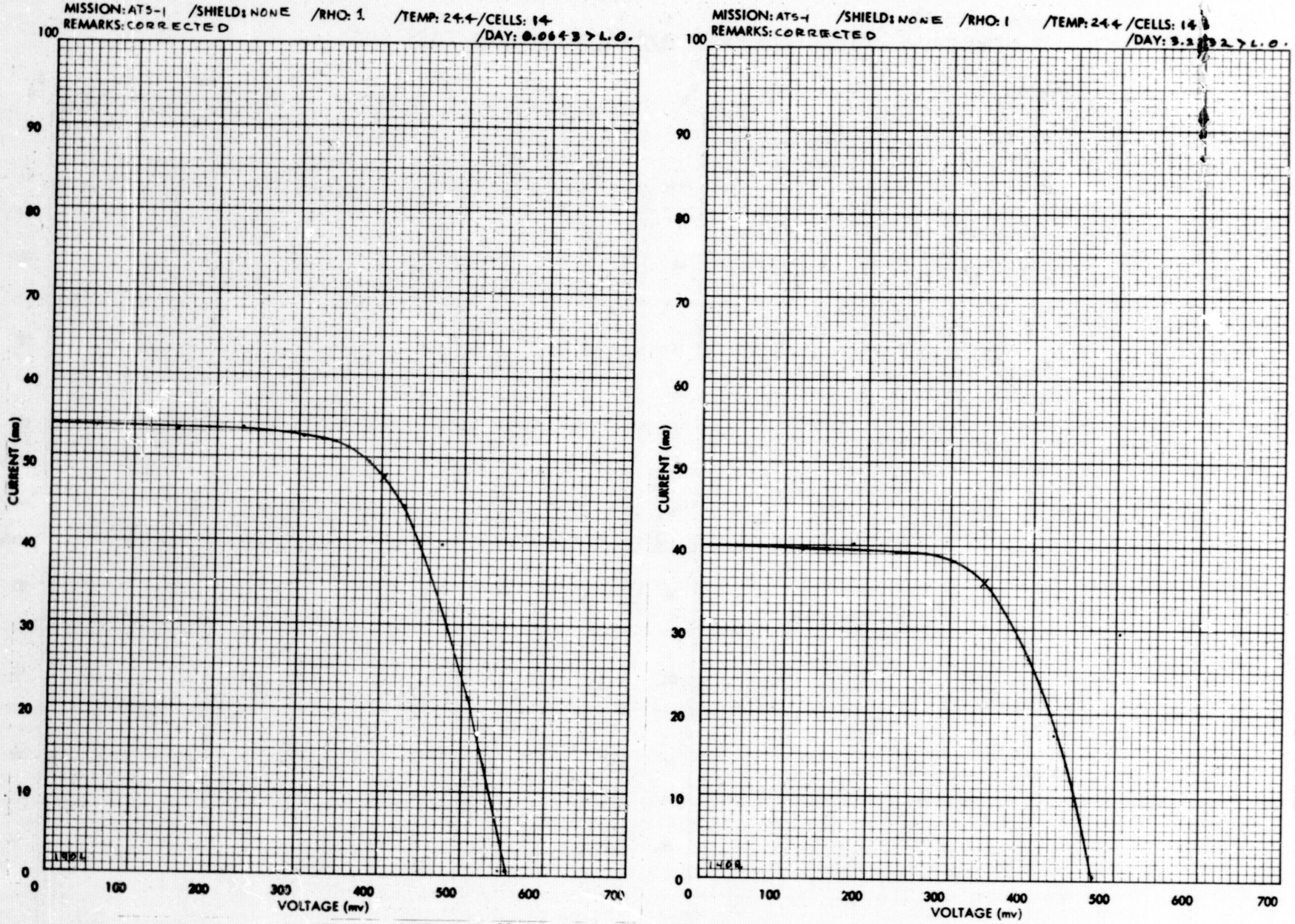
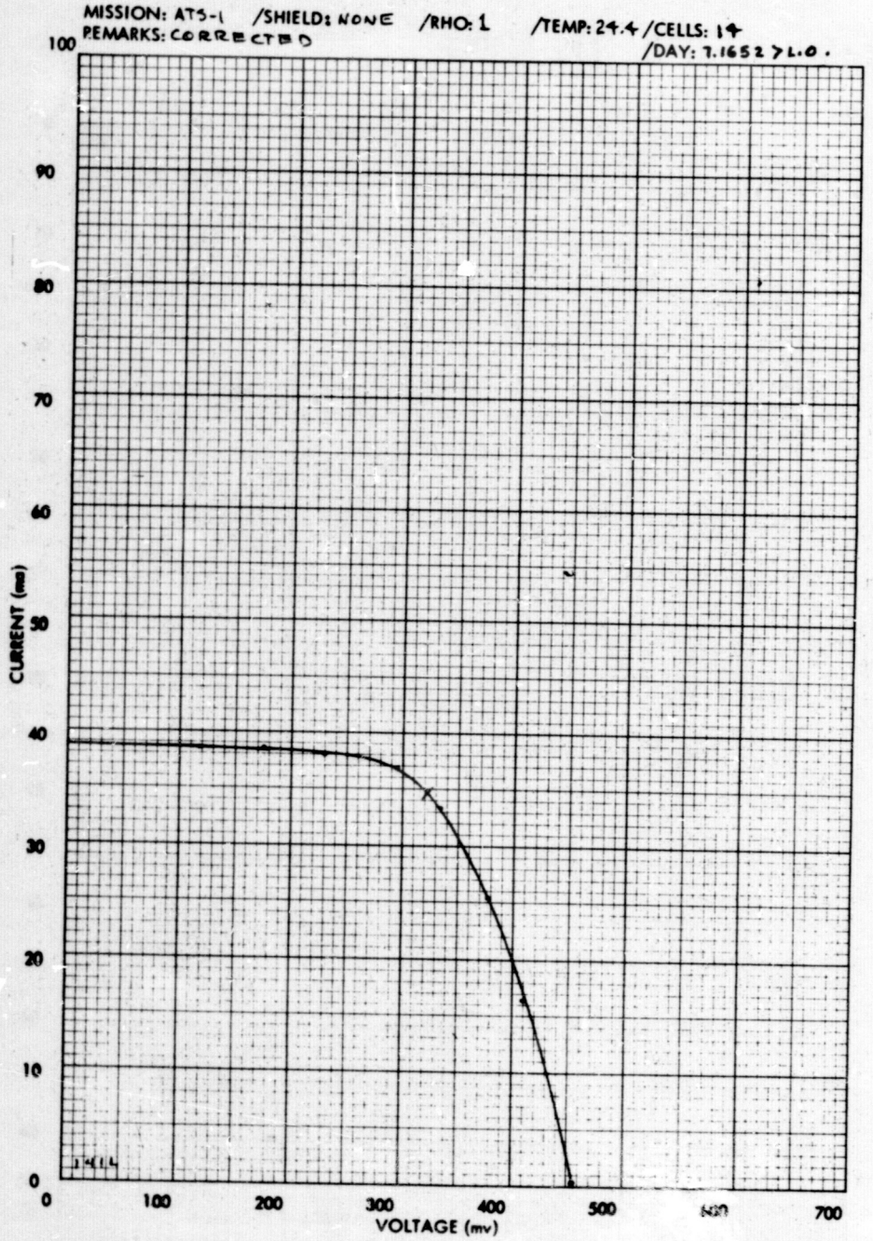
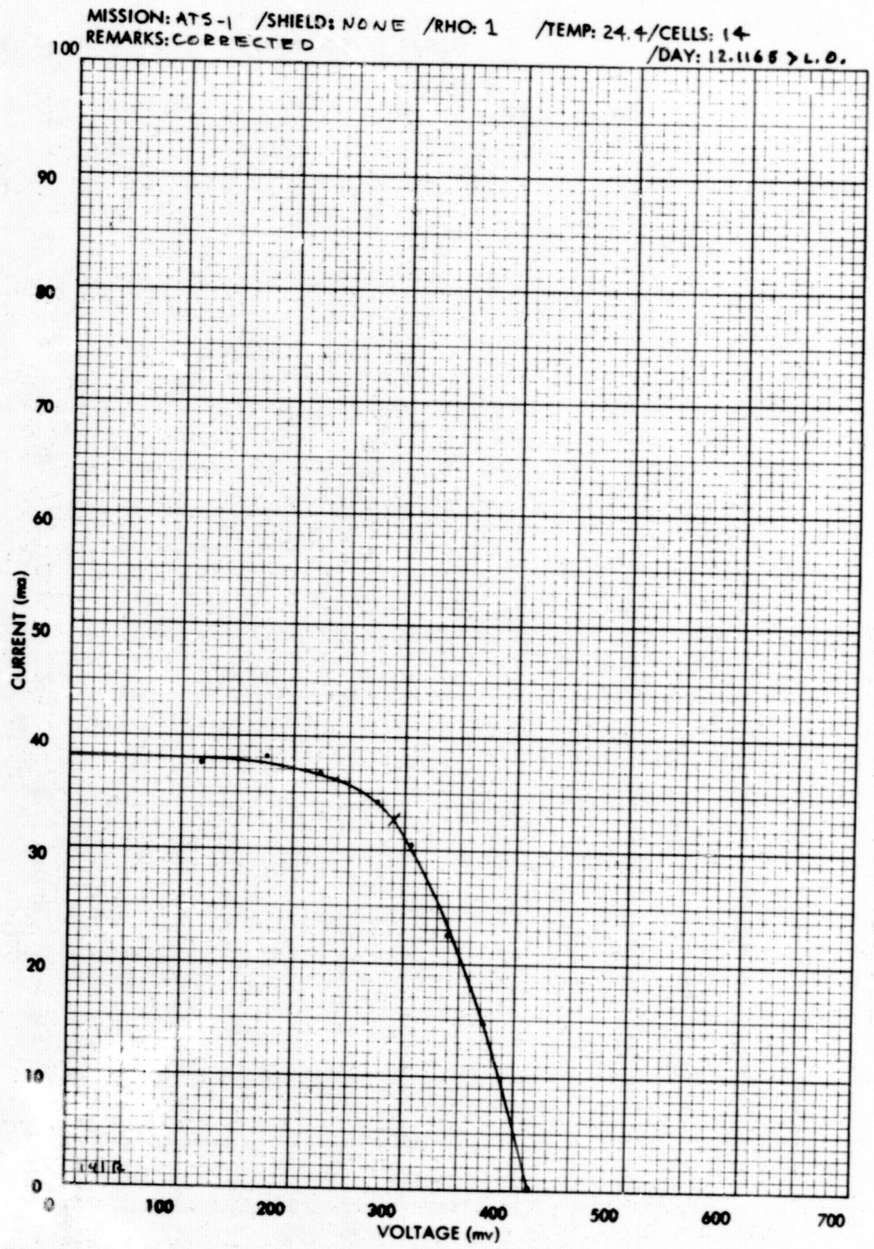


Figure 140. Cell 14, Days 0.064 and 3.2. Corrected Data





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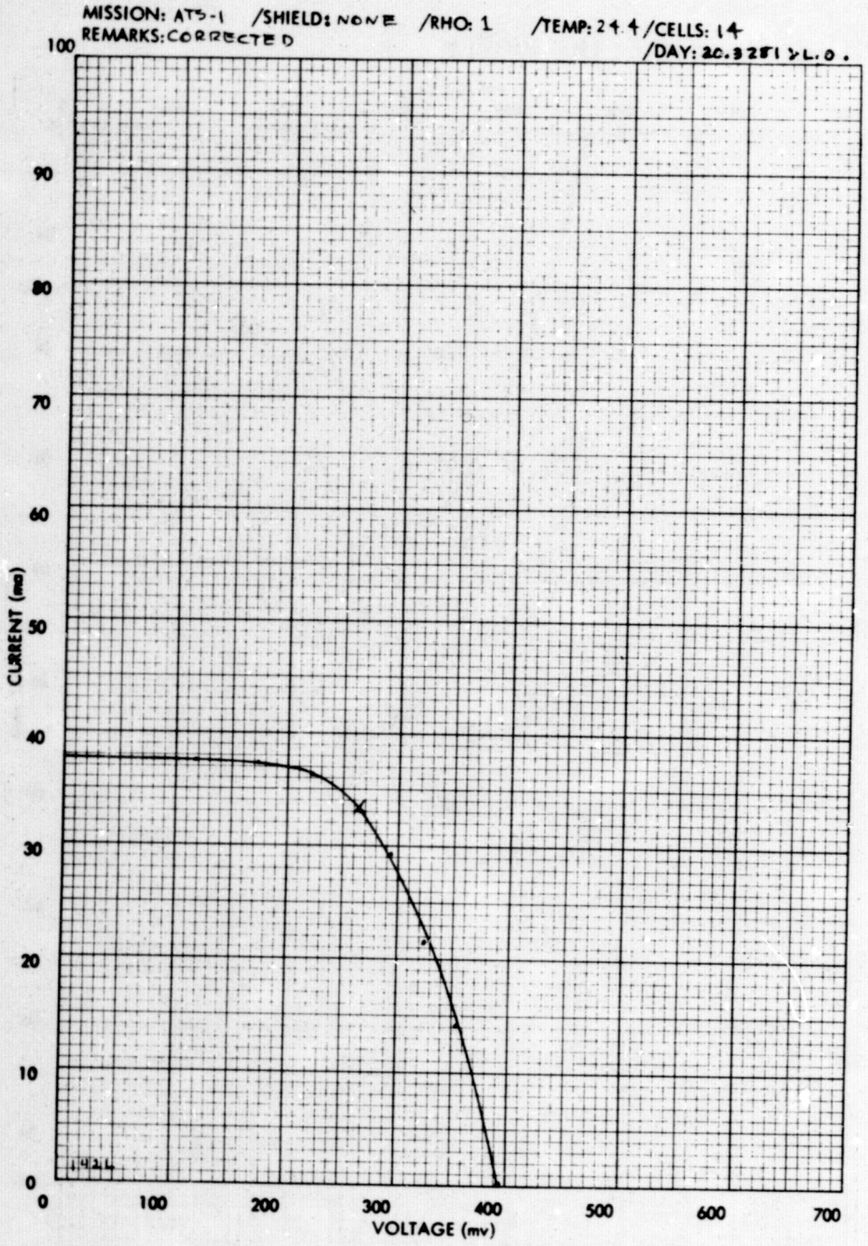


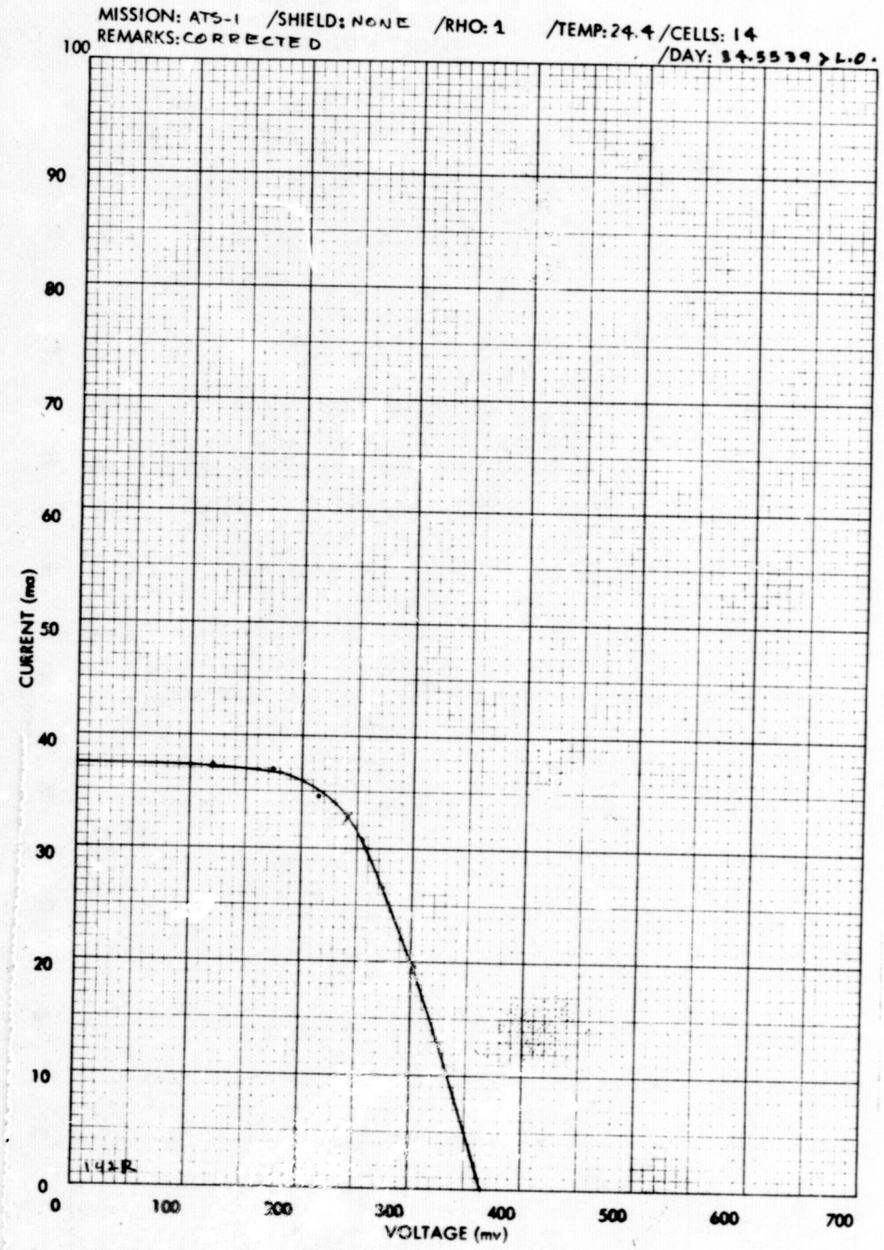


Figure 142. Cell 14, Days 20.3 and 34.5. Corrected Data

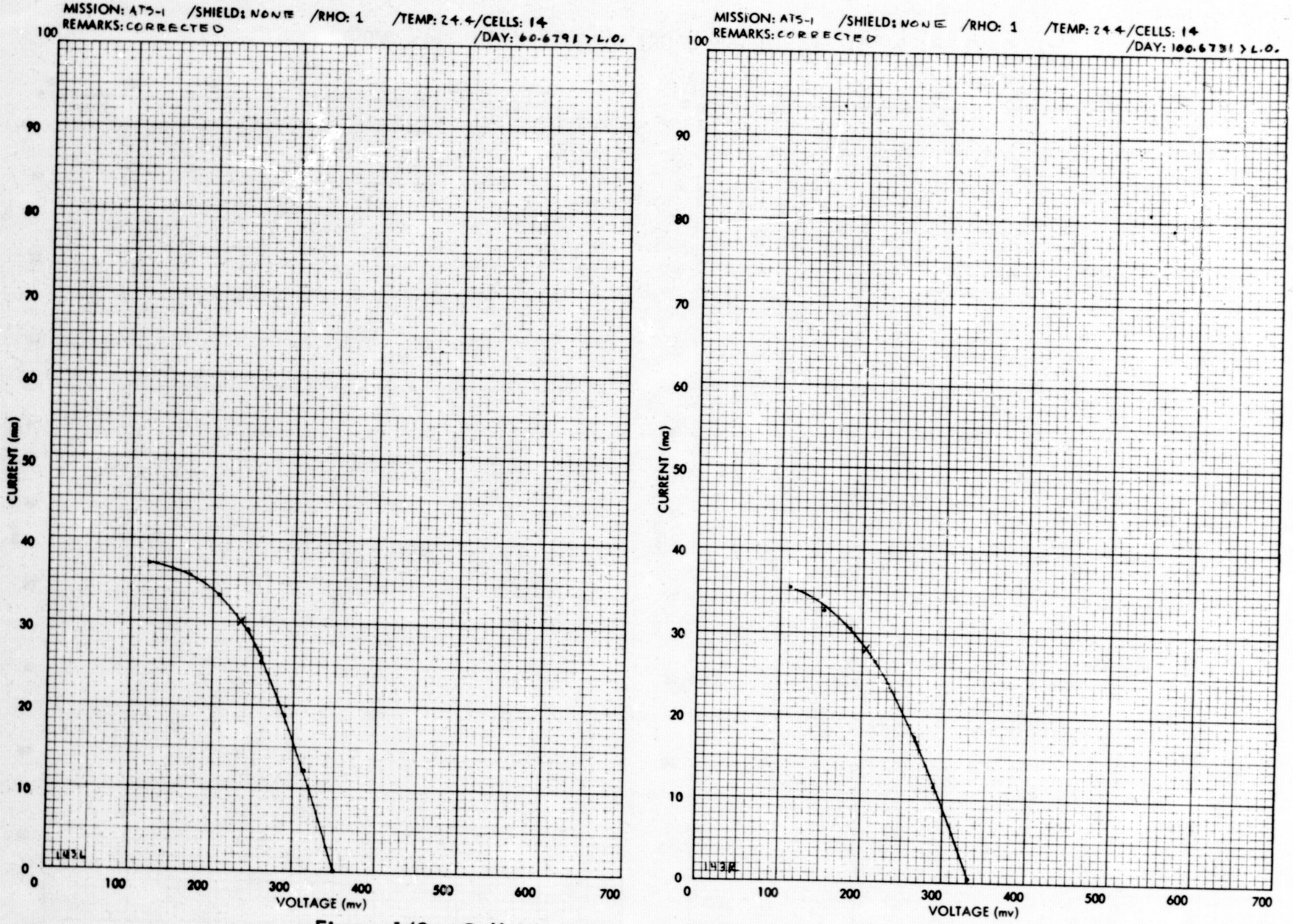
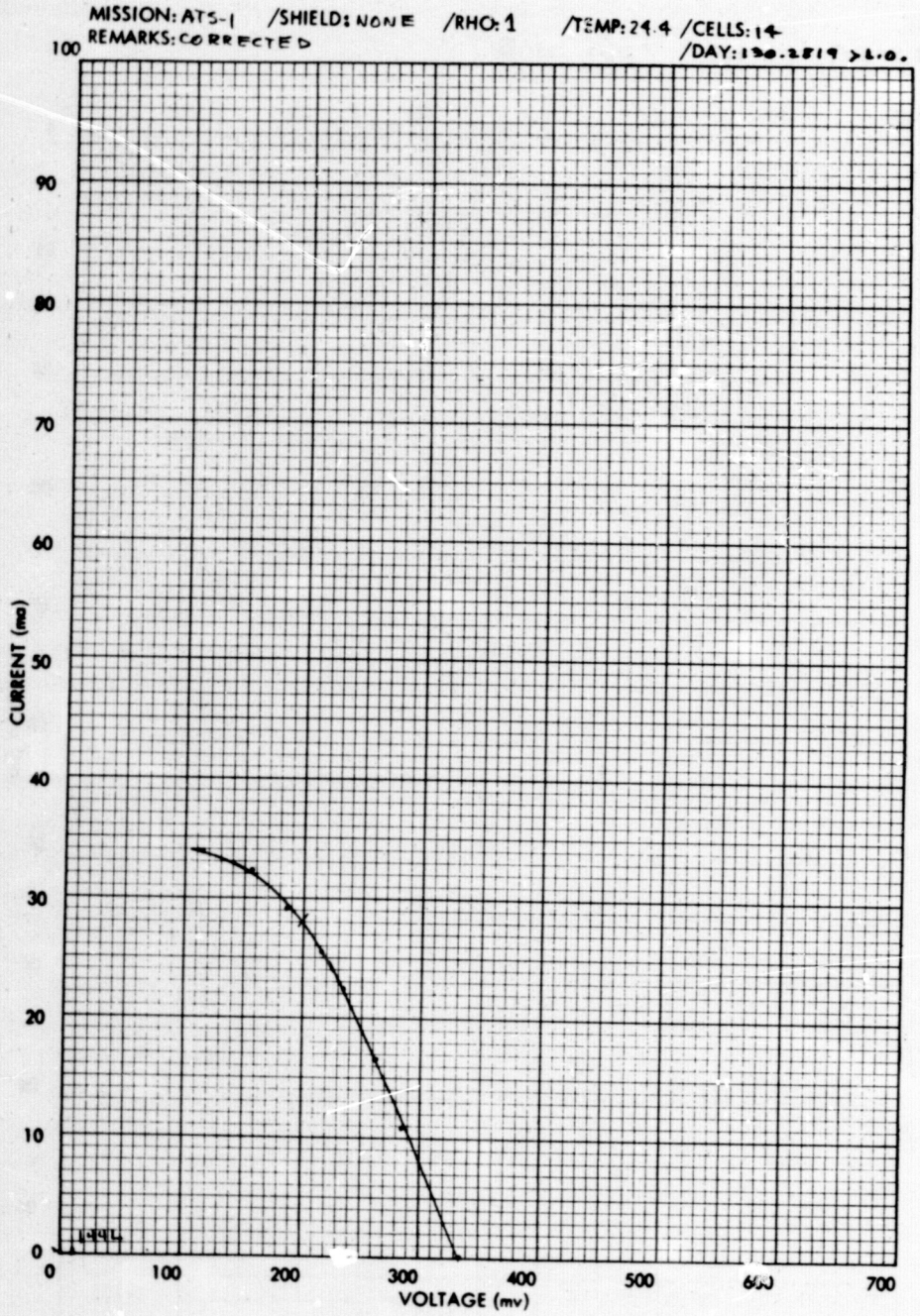


Figure 143. Cell 14, Days 60.6 and 100.6. Corrected Data



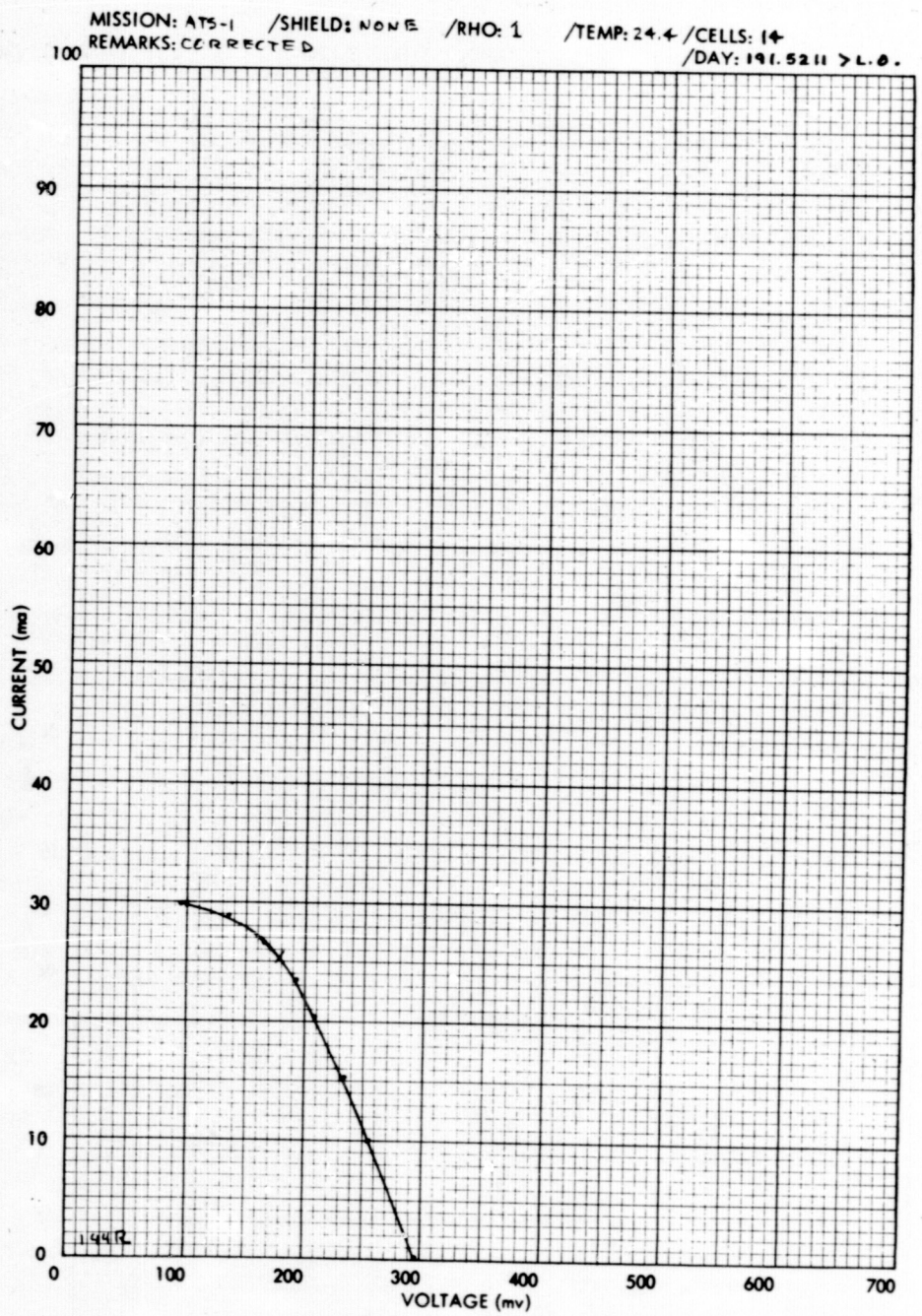


Figure 144. Cell 14, Days 130.2 and 191.5. Corrected Data

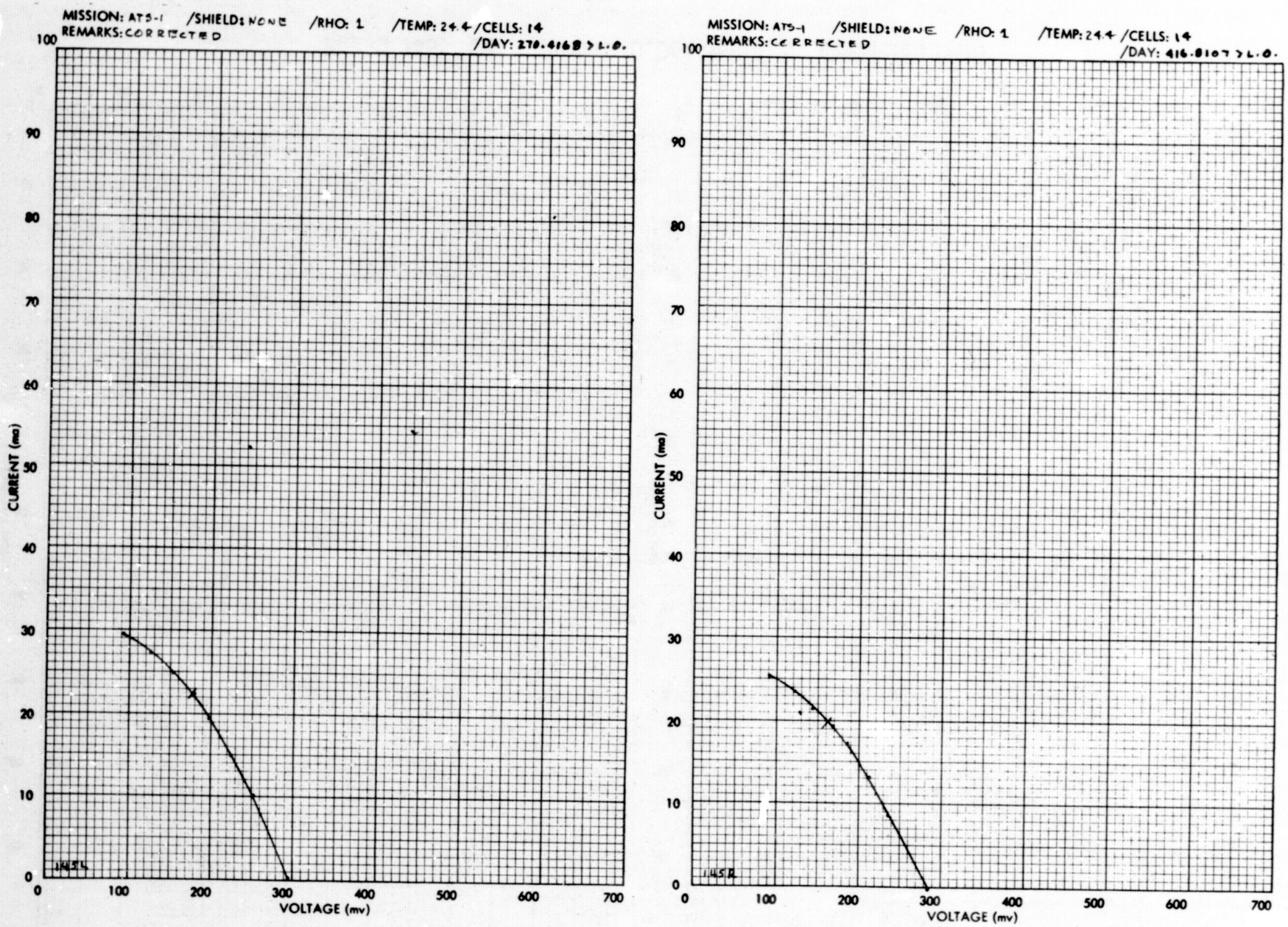
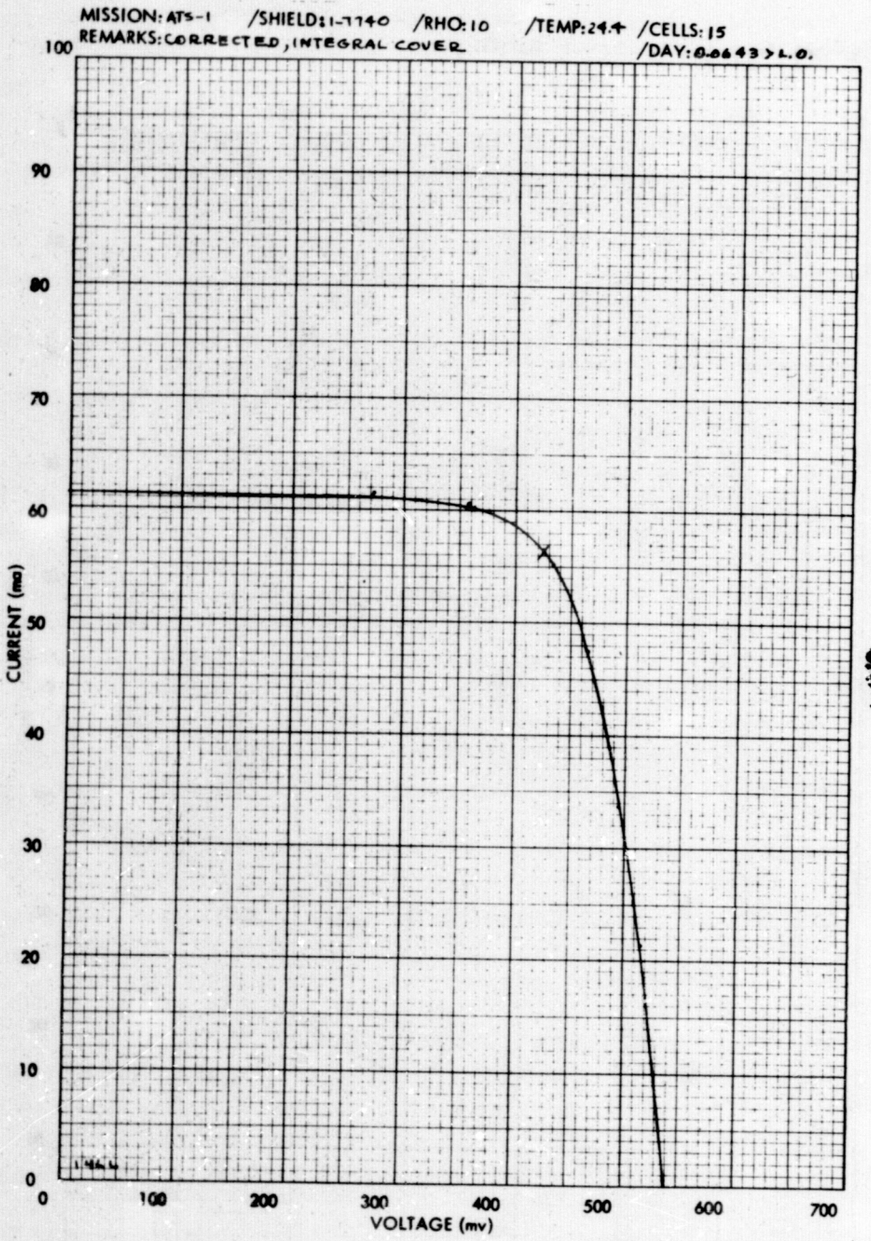
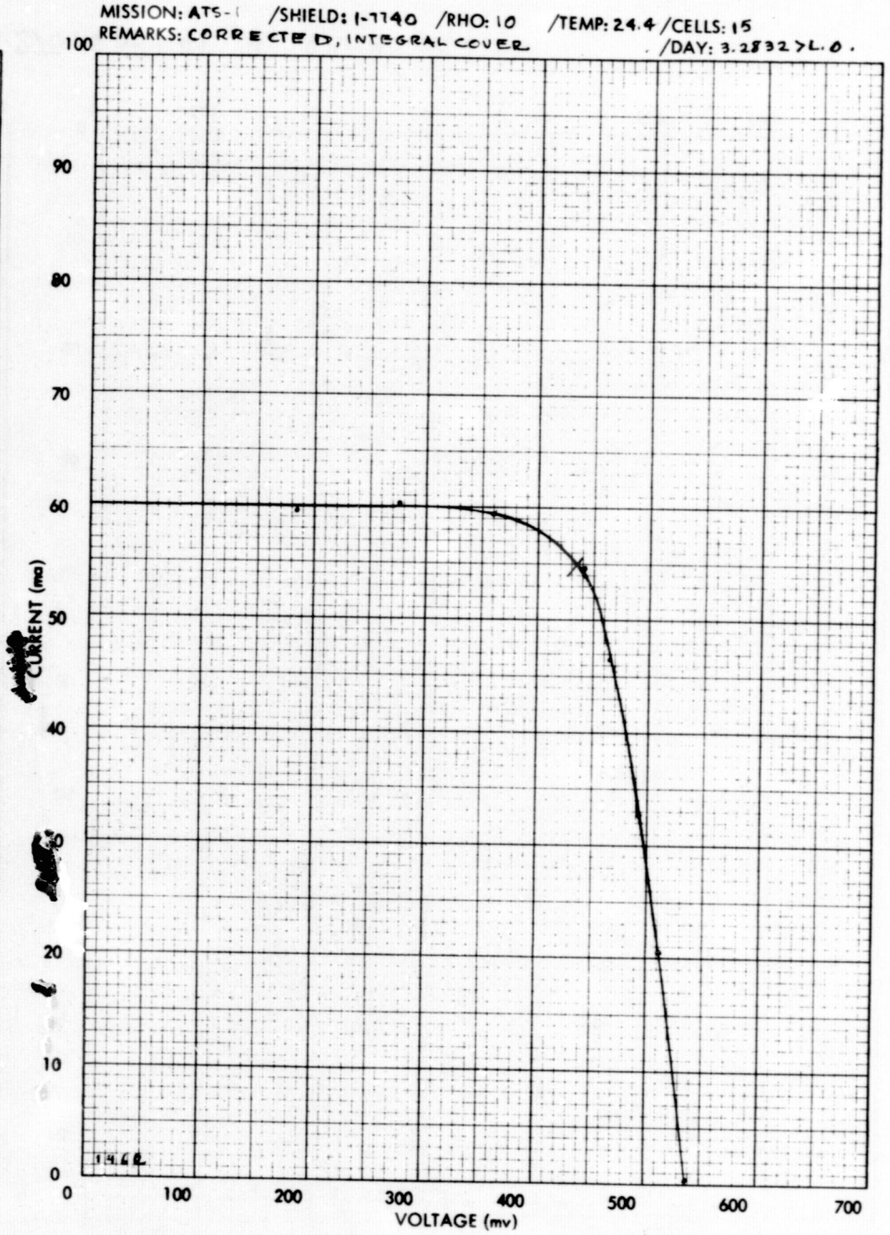


Figure 145. Cell 14, Days 270.4 and 416.8. Corrected Data





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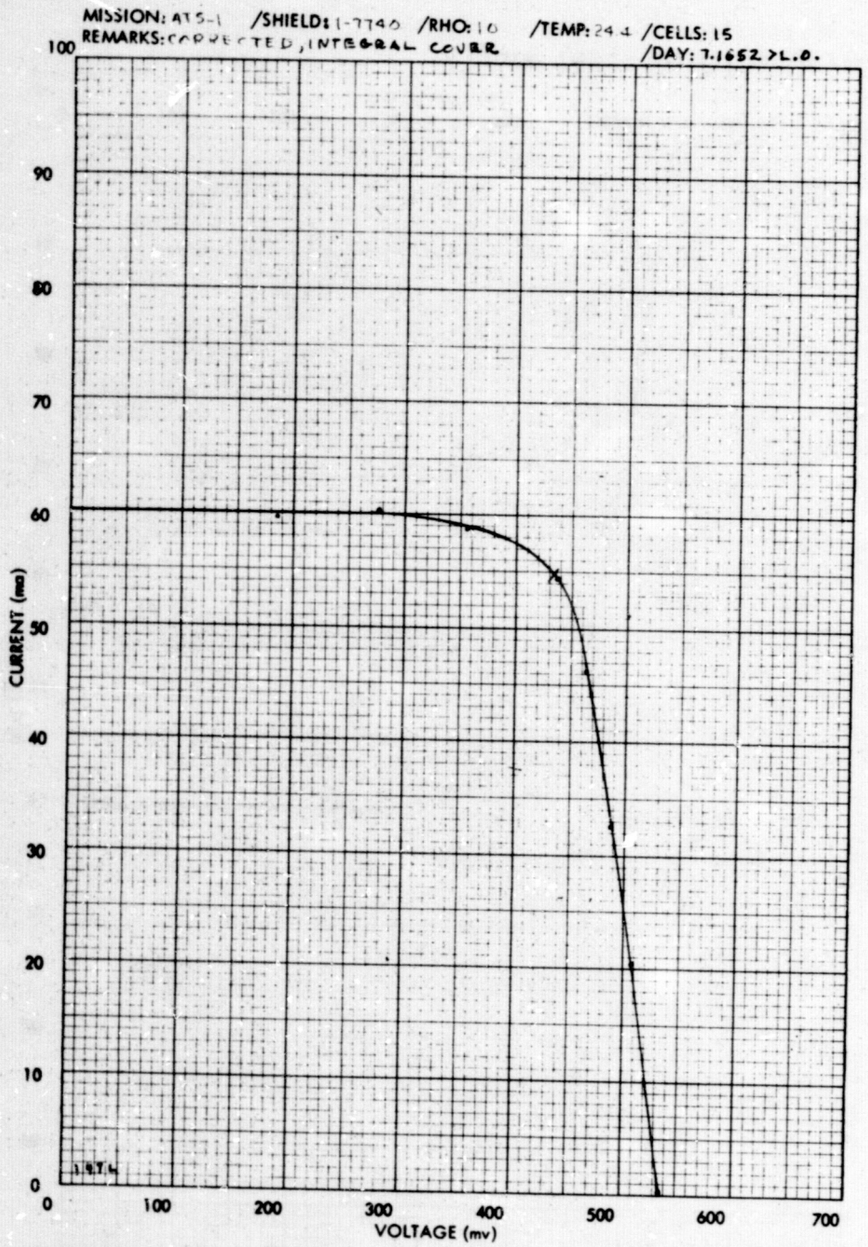


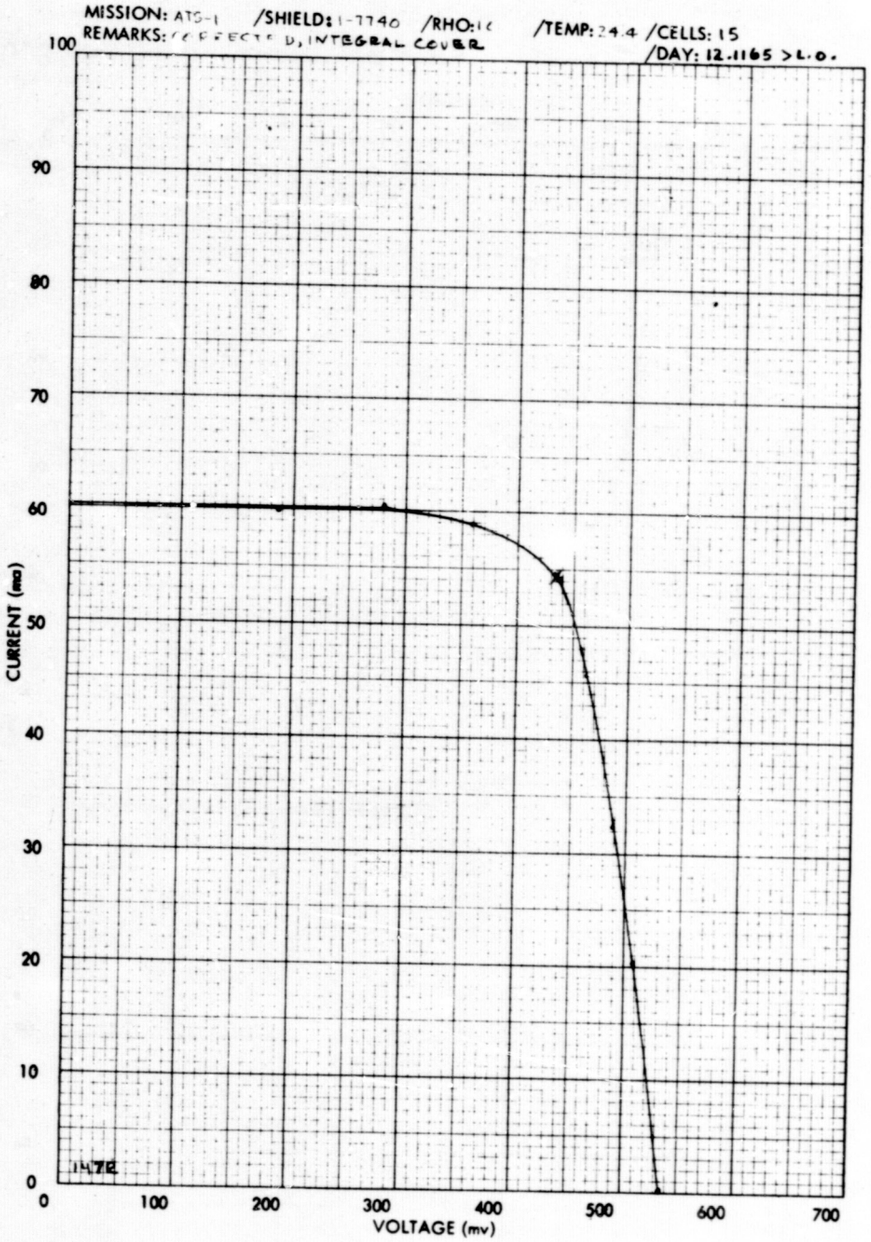
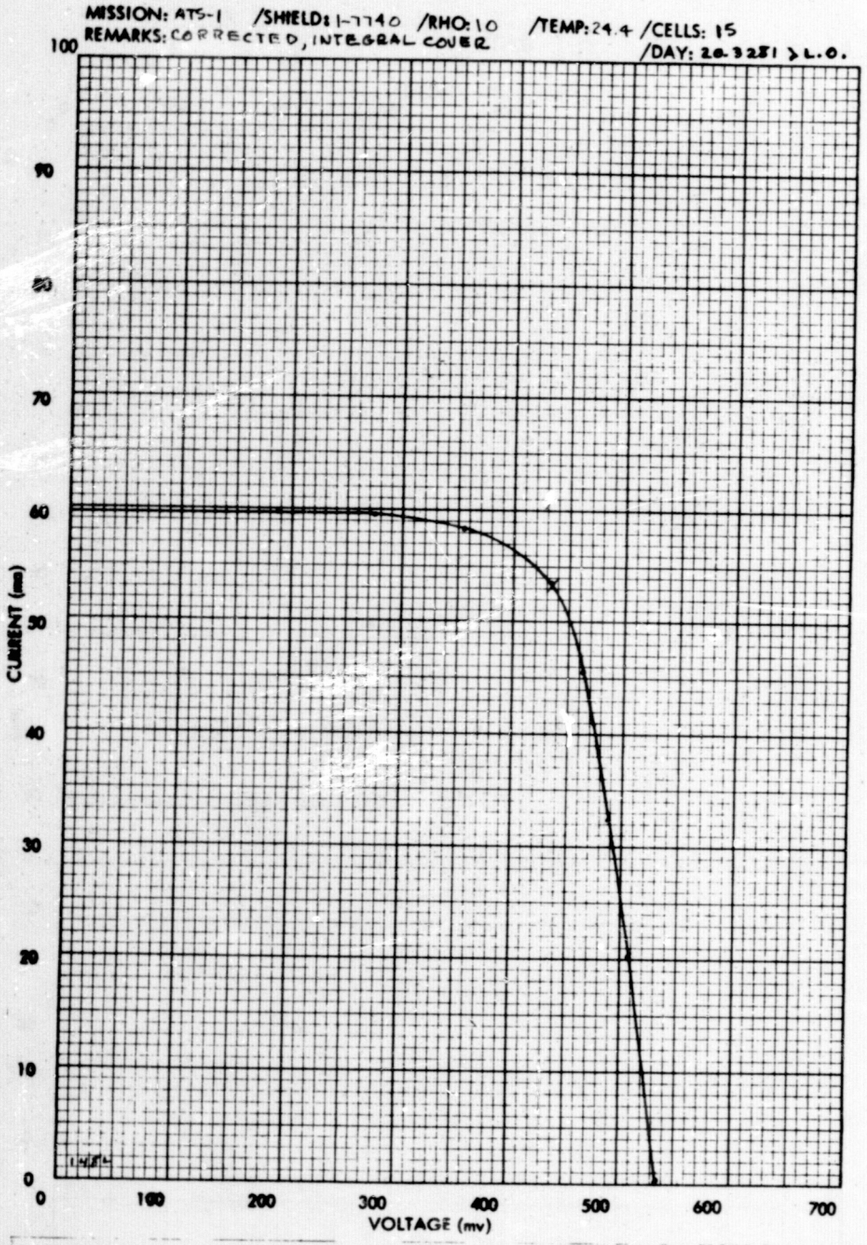


Figure 147. Cell 15, Days 7.1 and 12.1. Corrected Data



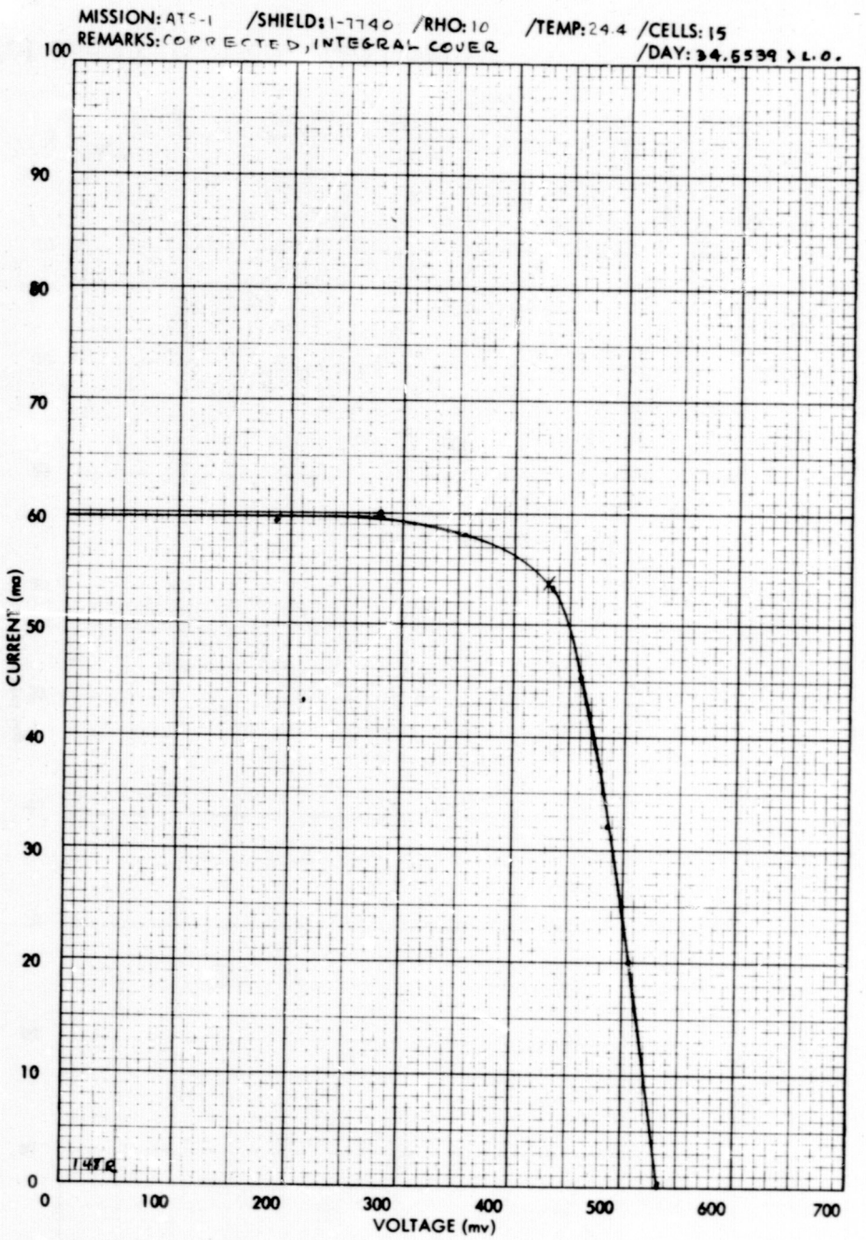


Figure 148. Cell 15, Days 20.3 and 34.5. Corrected Data

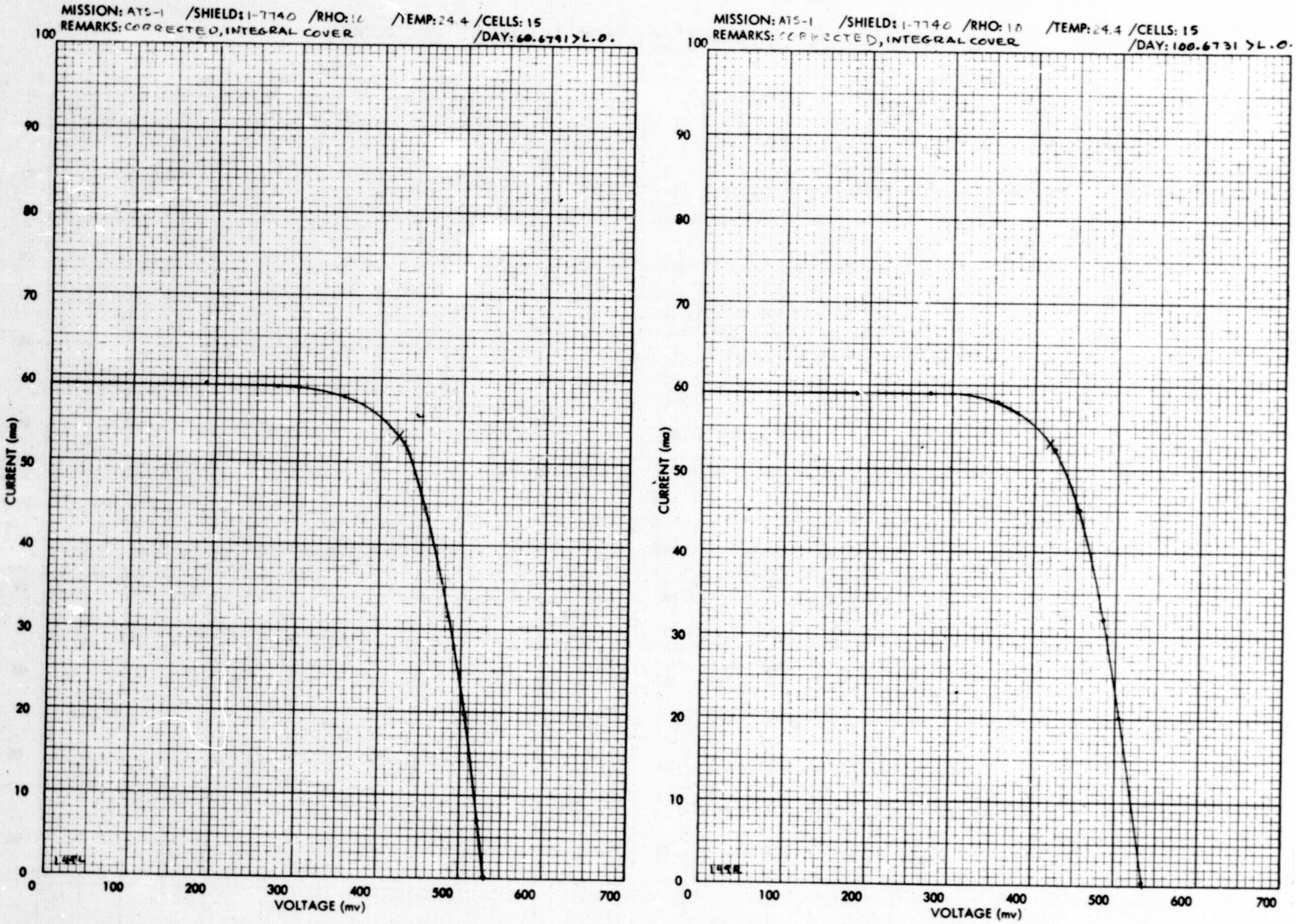
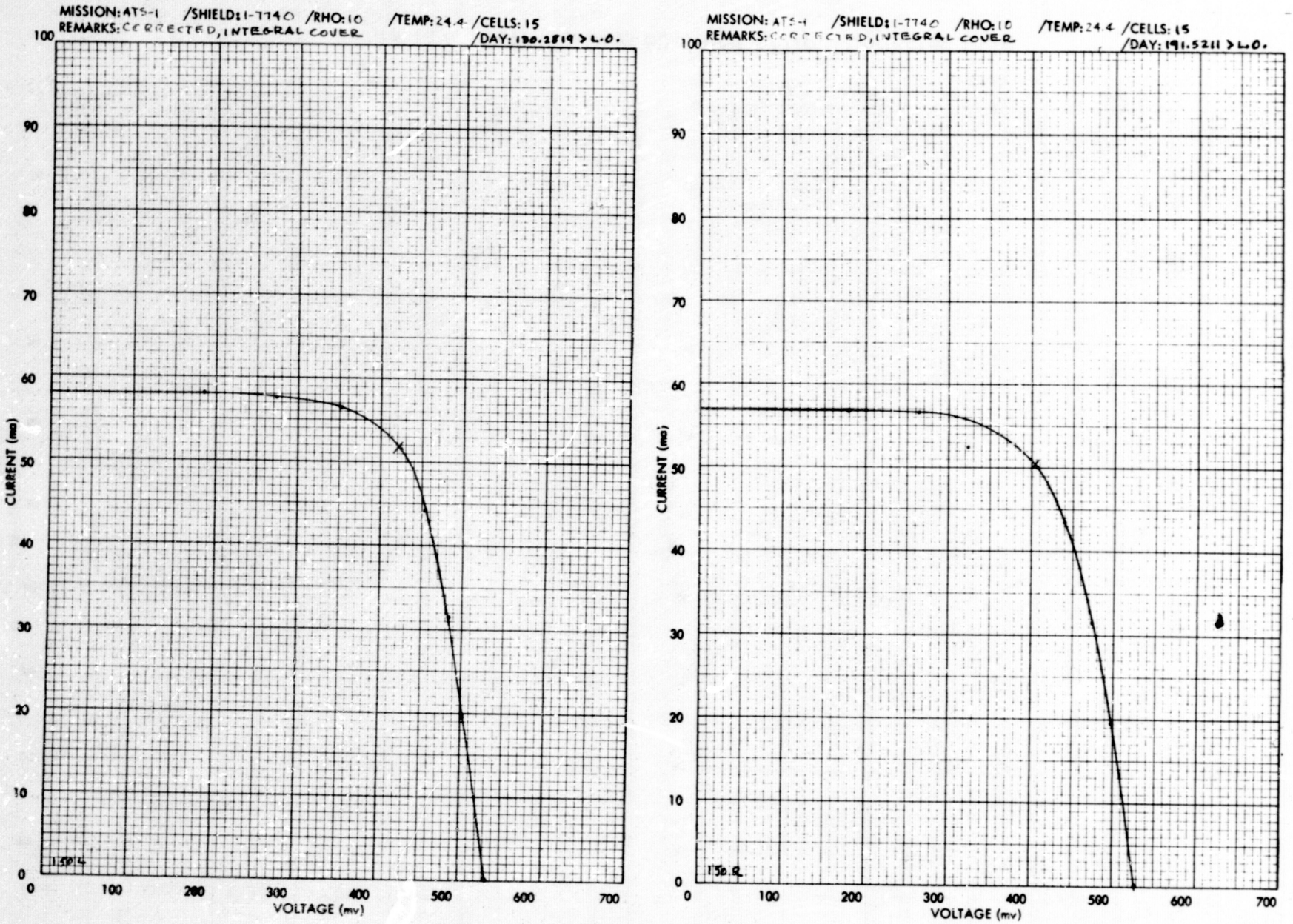


Figure 149. Cell 15, Days 60.6 and 100.6. Corrected Data



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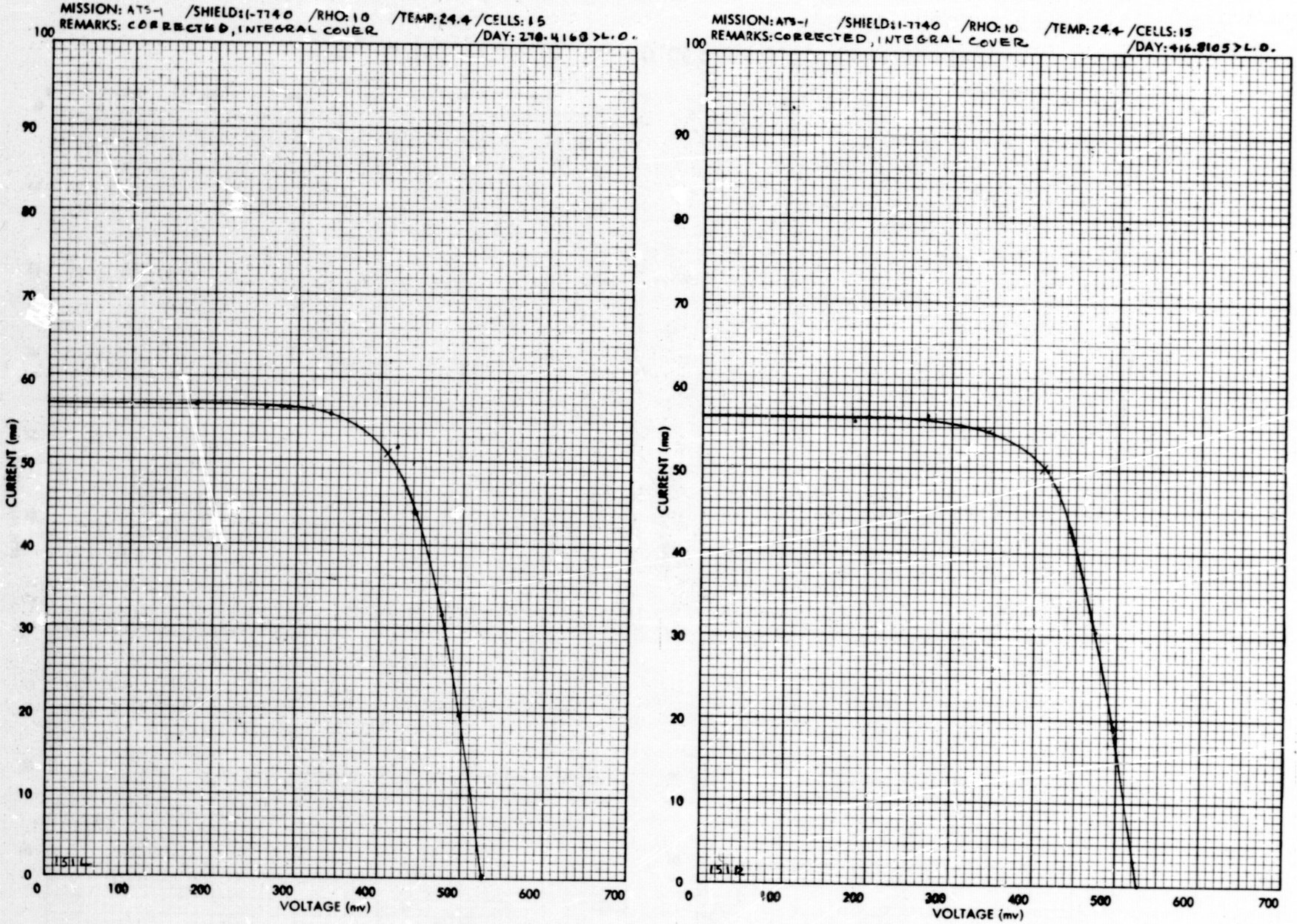
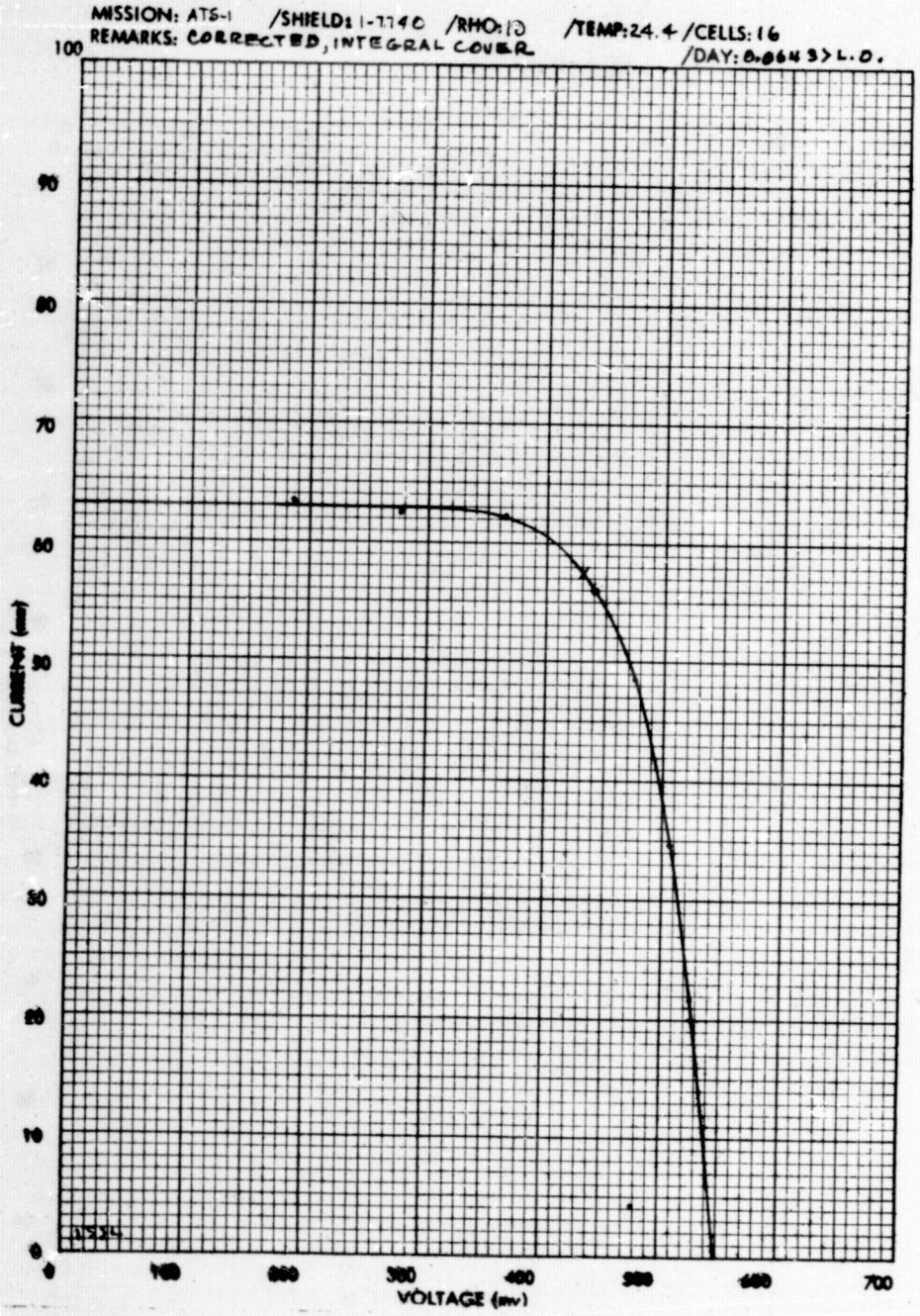


Figure 151. Cell 15, Days 270.4 and 416.8. Corrected Data



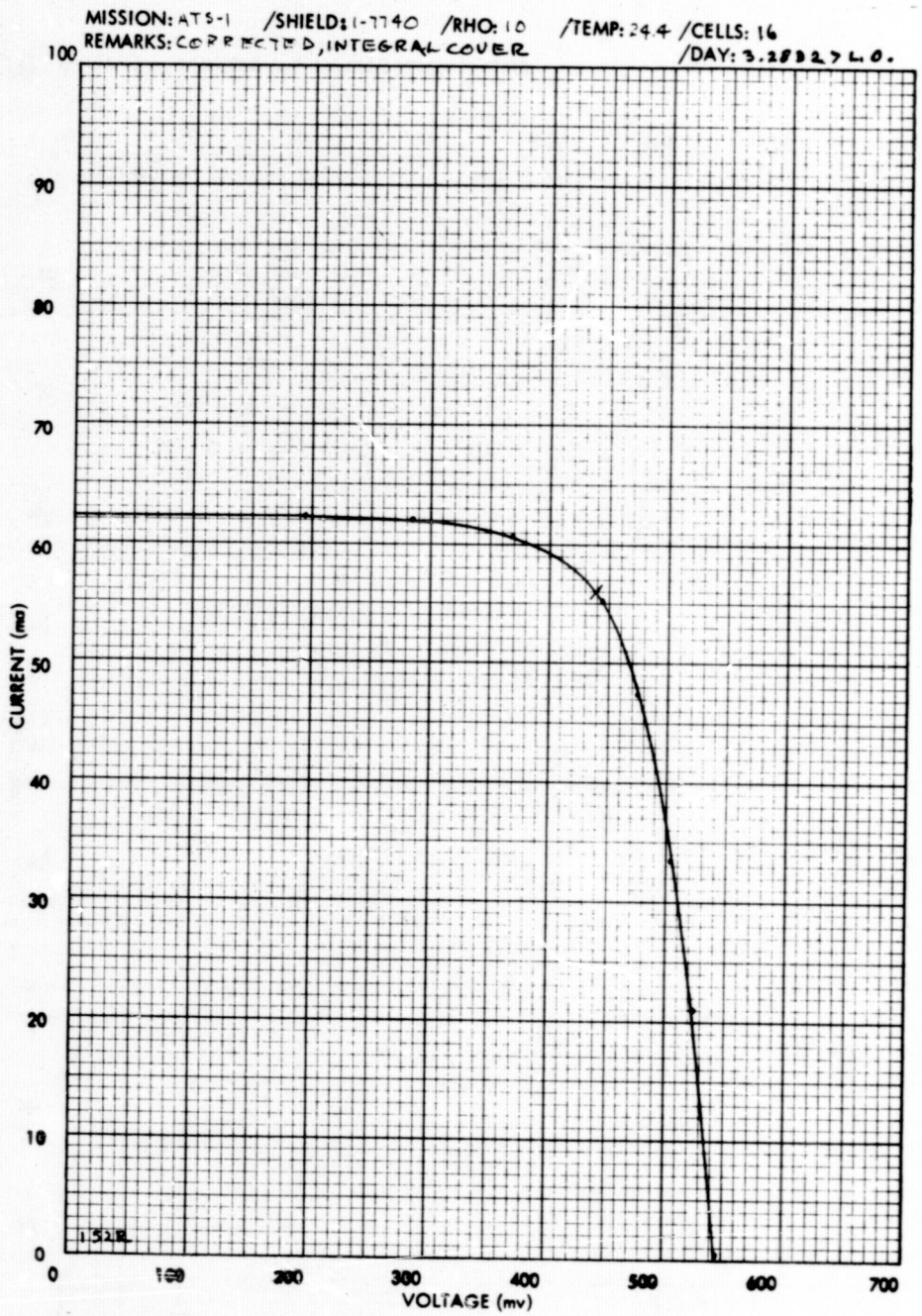
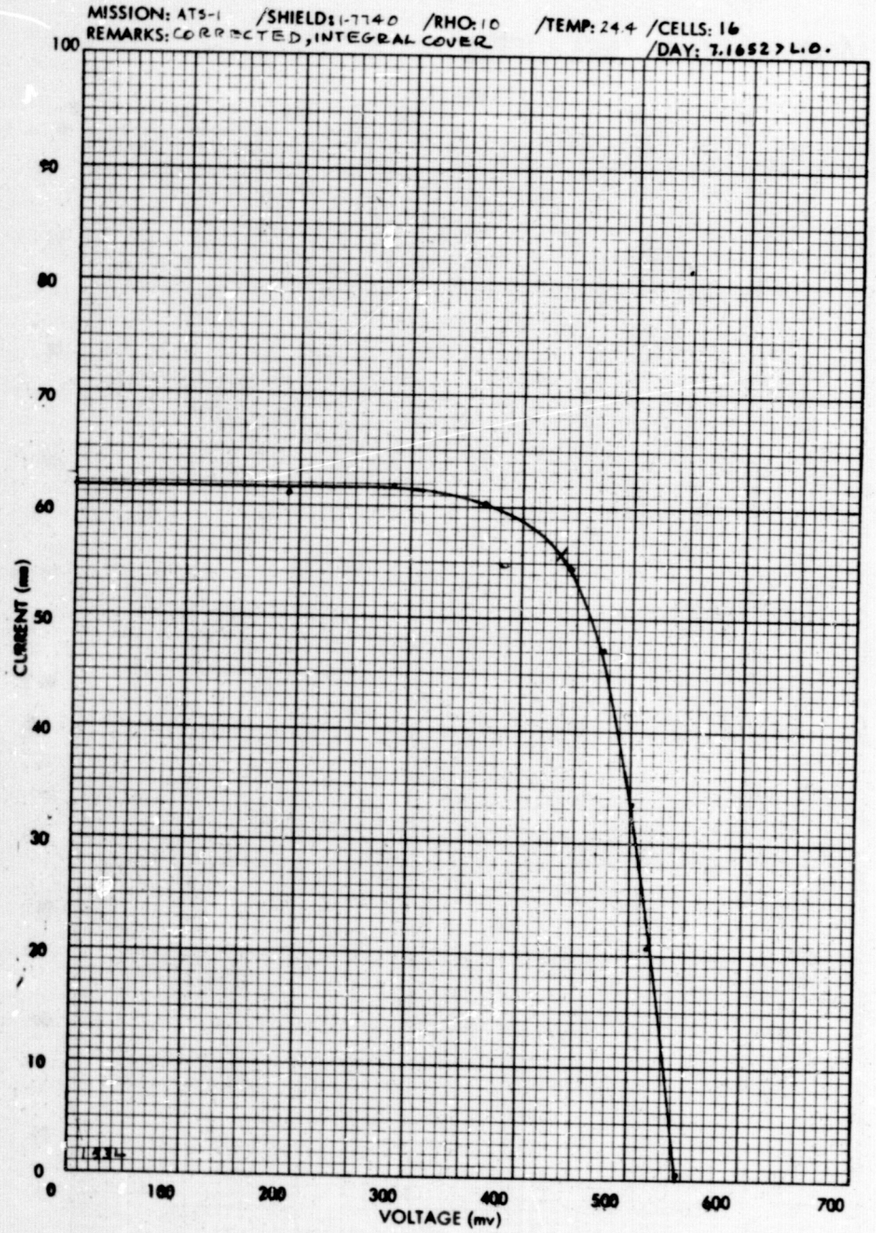


Figure 152. Cell 16, Days 0.064 and 3.2. Corrected Data



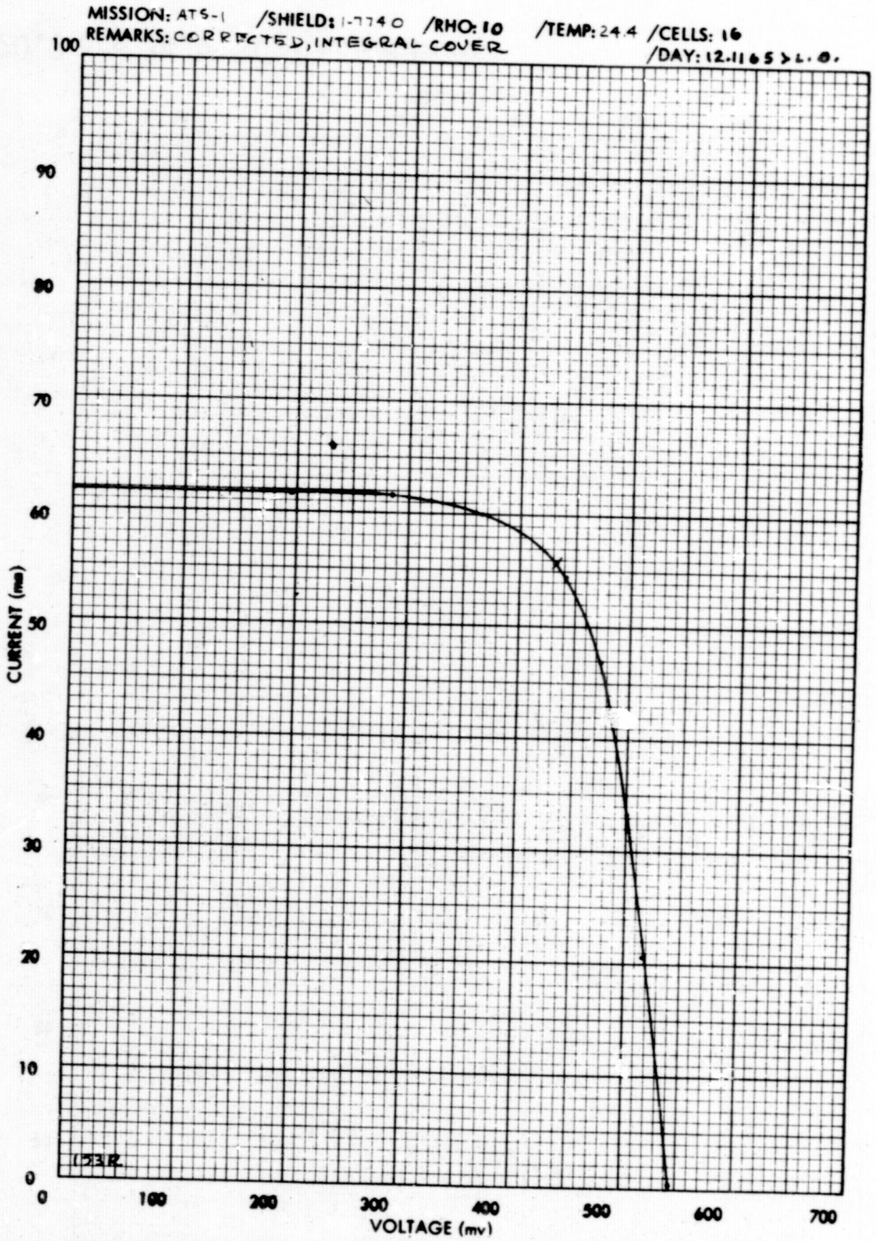
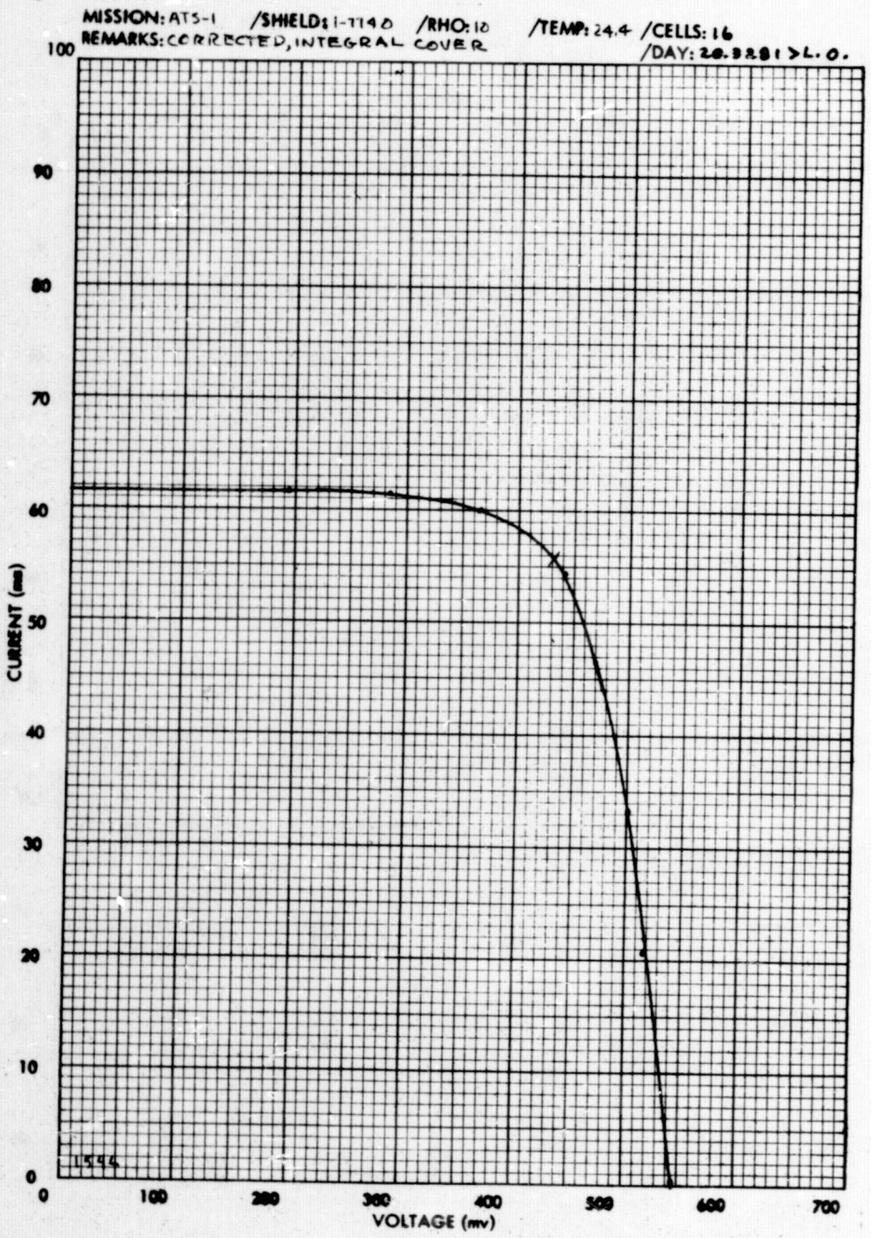


Figure 153. Cell 16, Days 7.1 and 12.1. Corrected Data



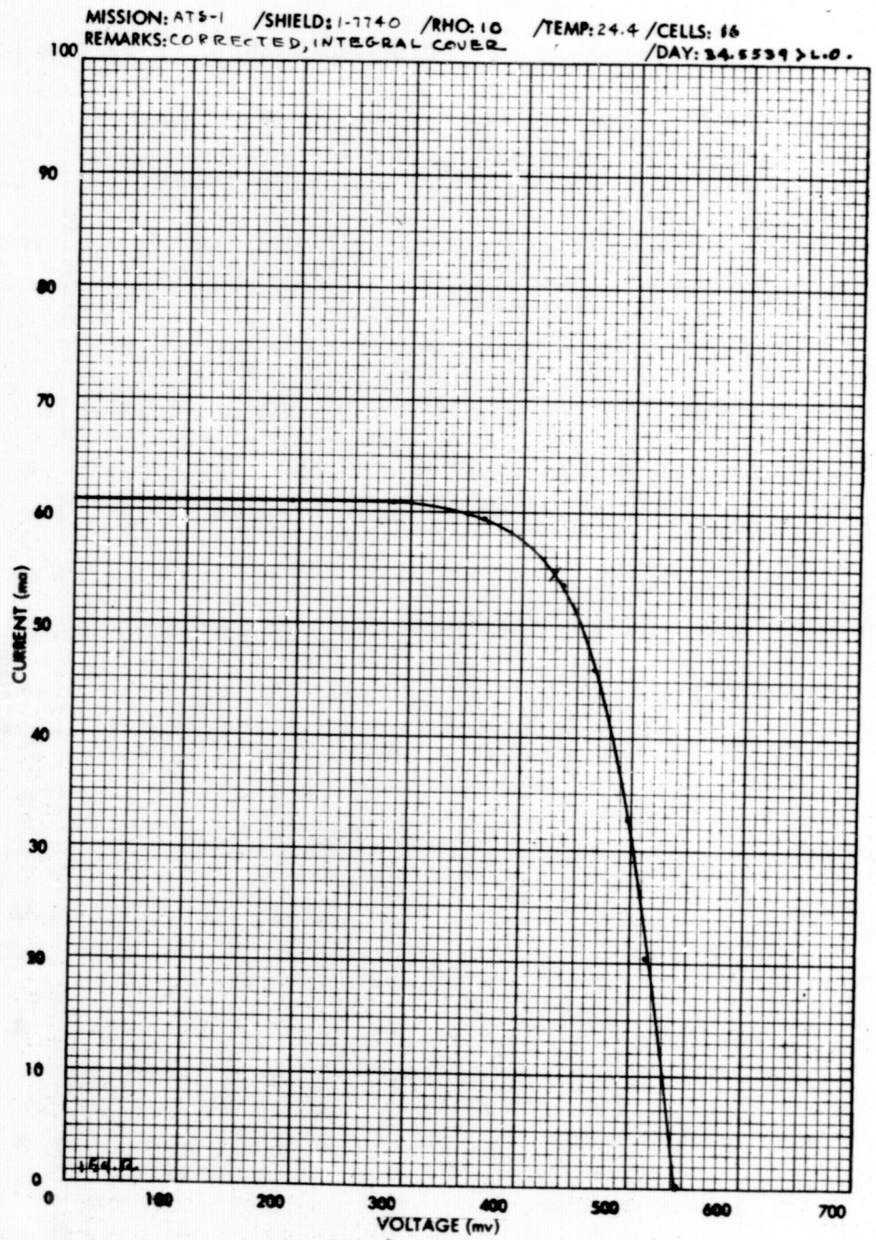


Figure 154. Cell 16, Days 20.3 and 34.5. Corrected Data

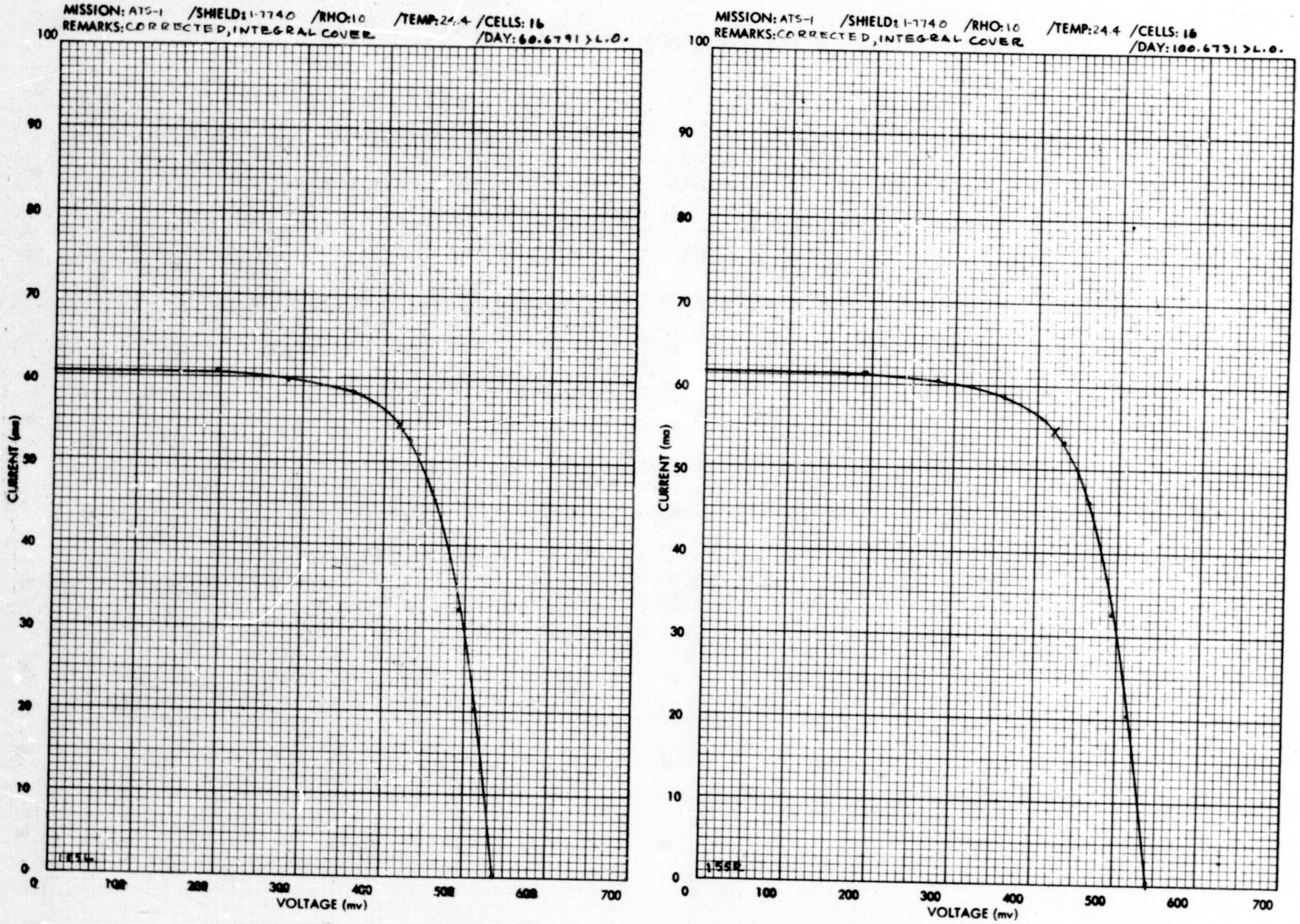
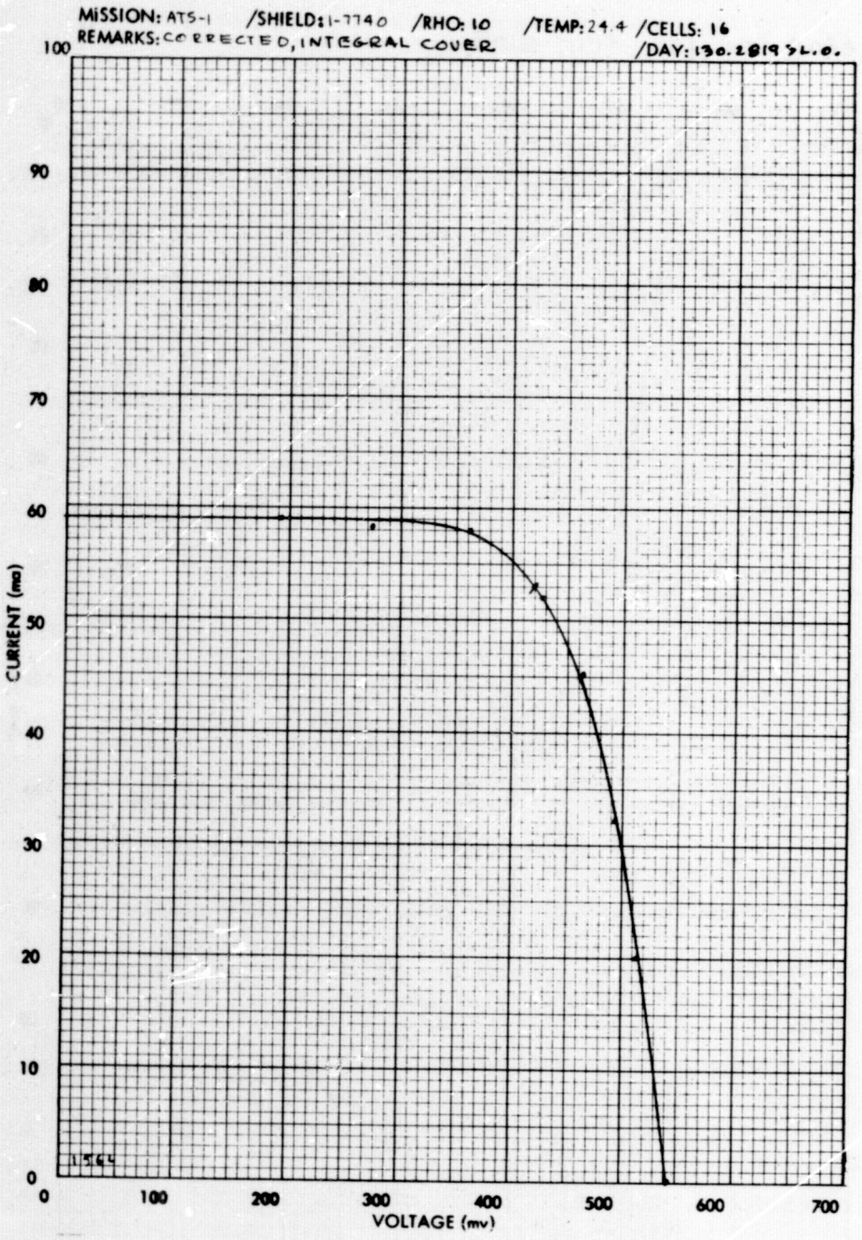


Figure 155. Cell 16, Days 60.6 and 100.6. Corrected Data



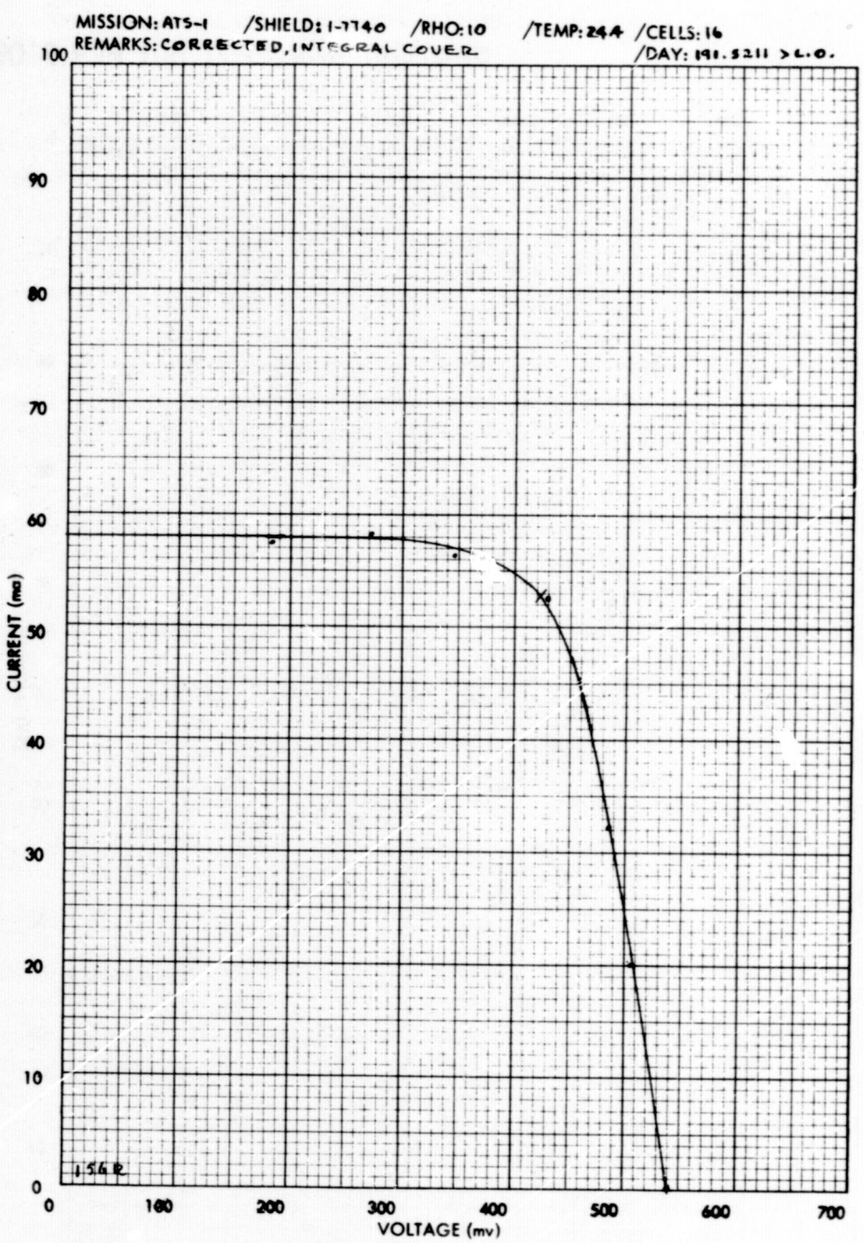
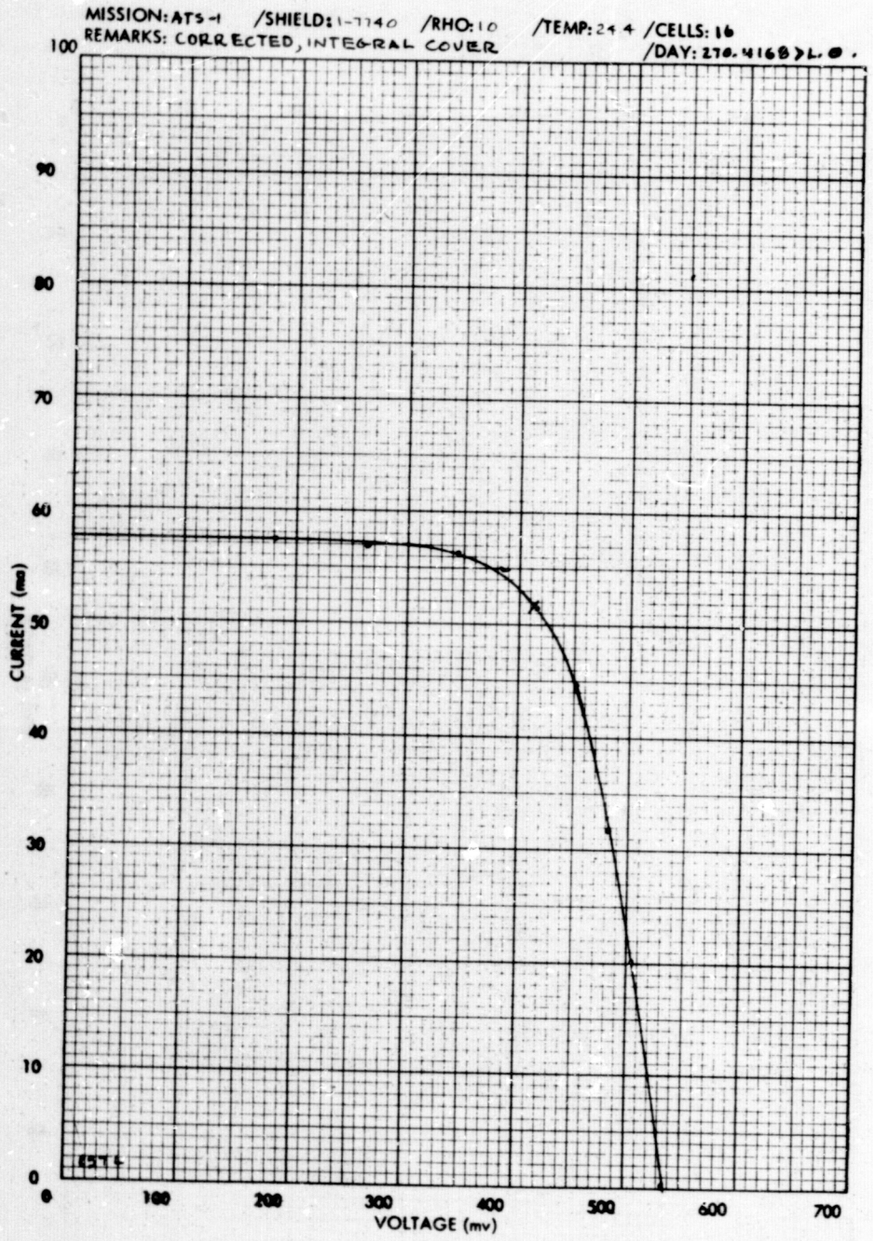


Figure 156. Cell 16, Days 130.2 and 191.5. Corrected Data



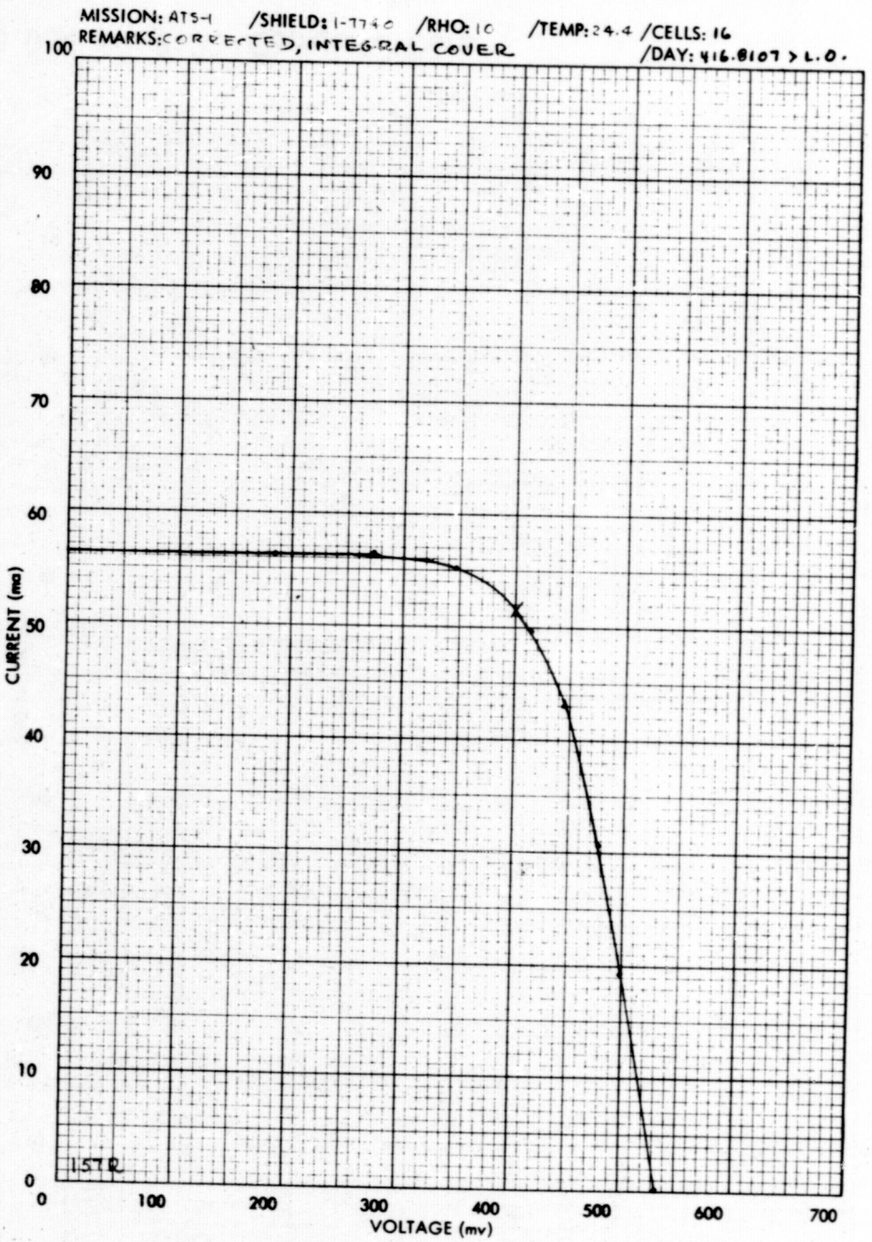
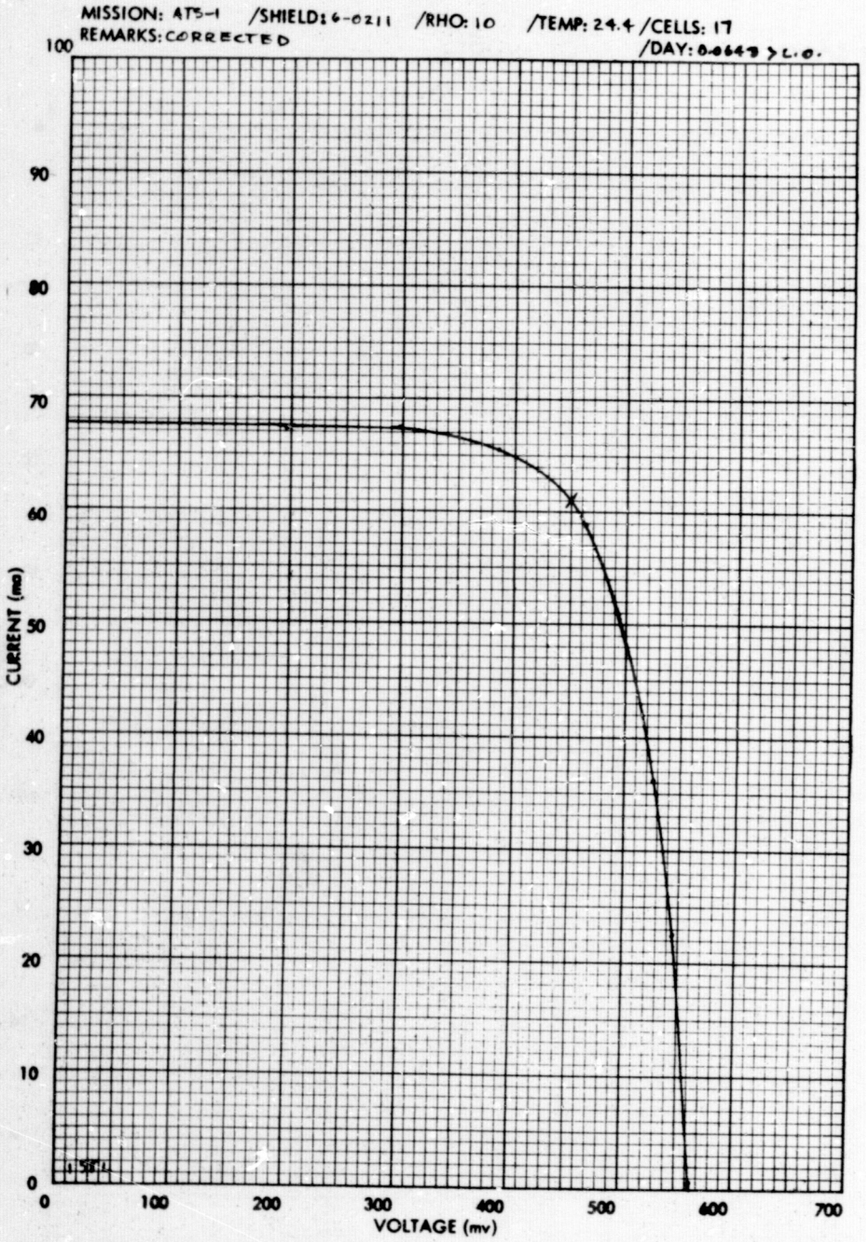


Figure 157. Cell 16, Days 270.4 and 416.8. Corrected Data



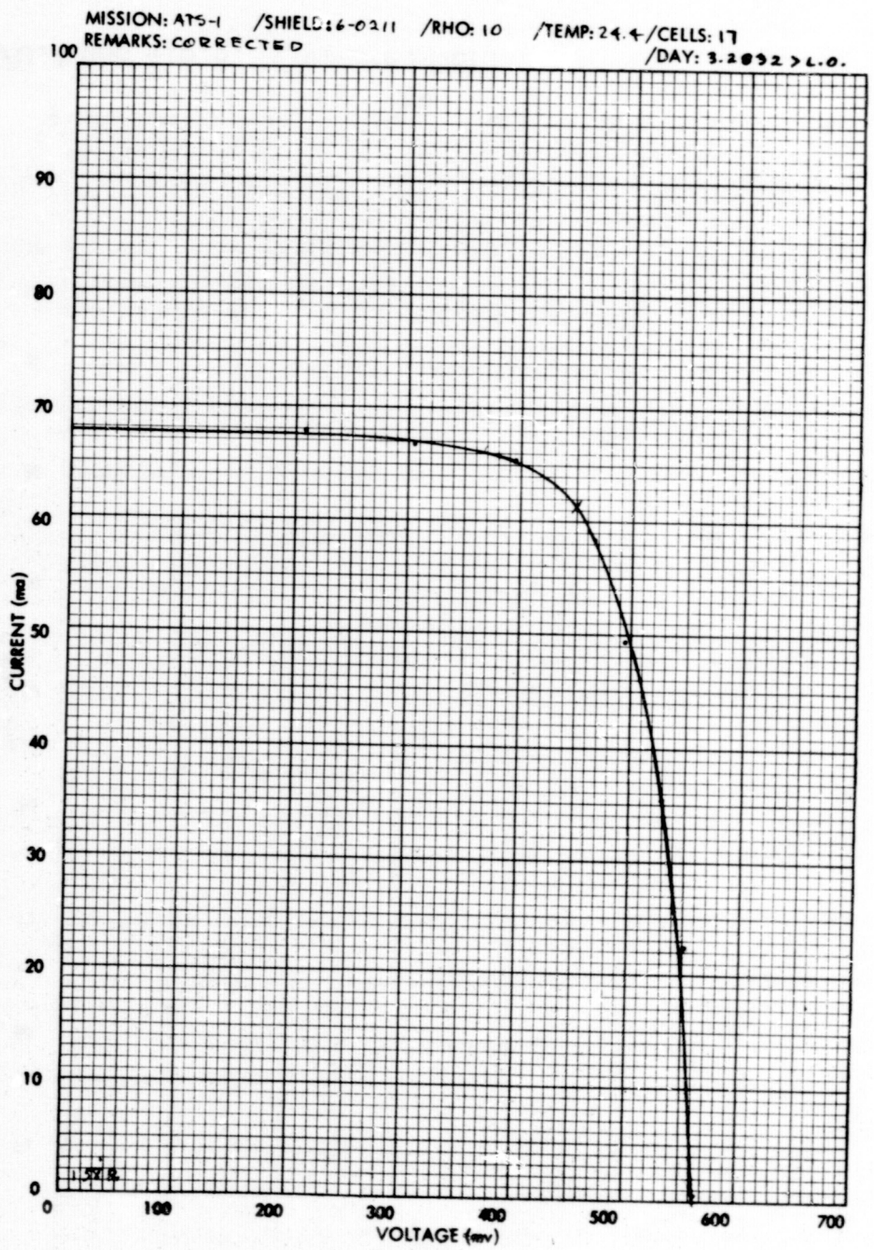
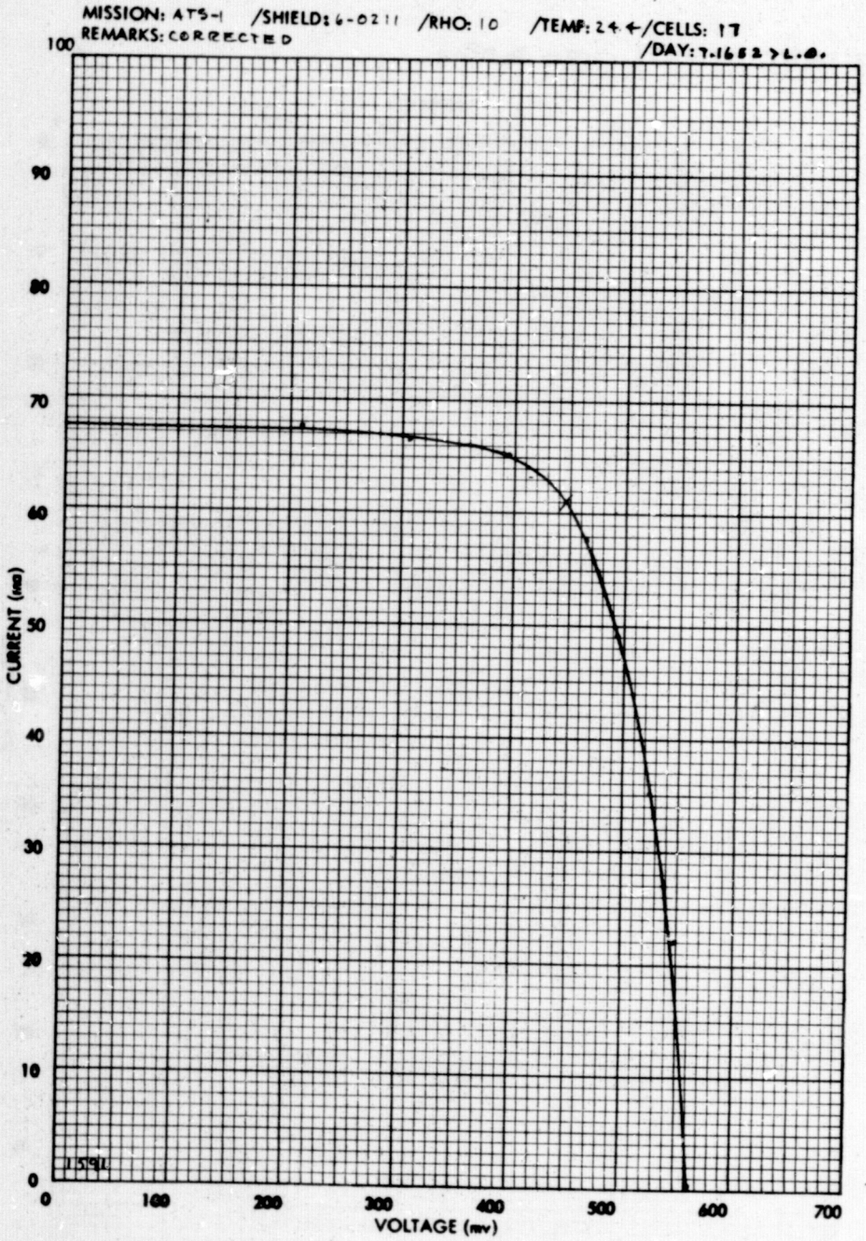


Figure 158. Cell 17, Days 0.064 and 3.2. Corrected Data



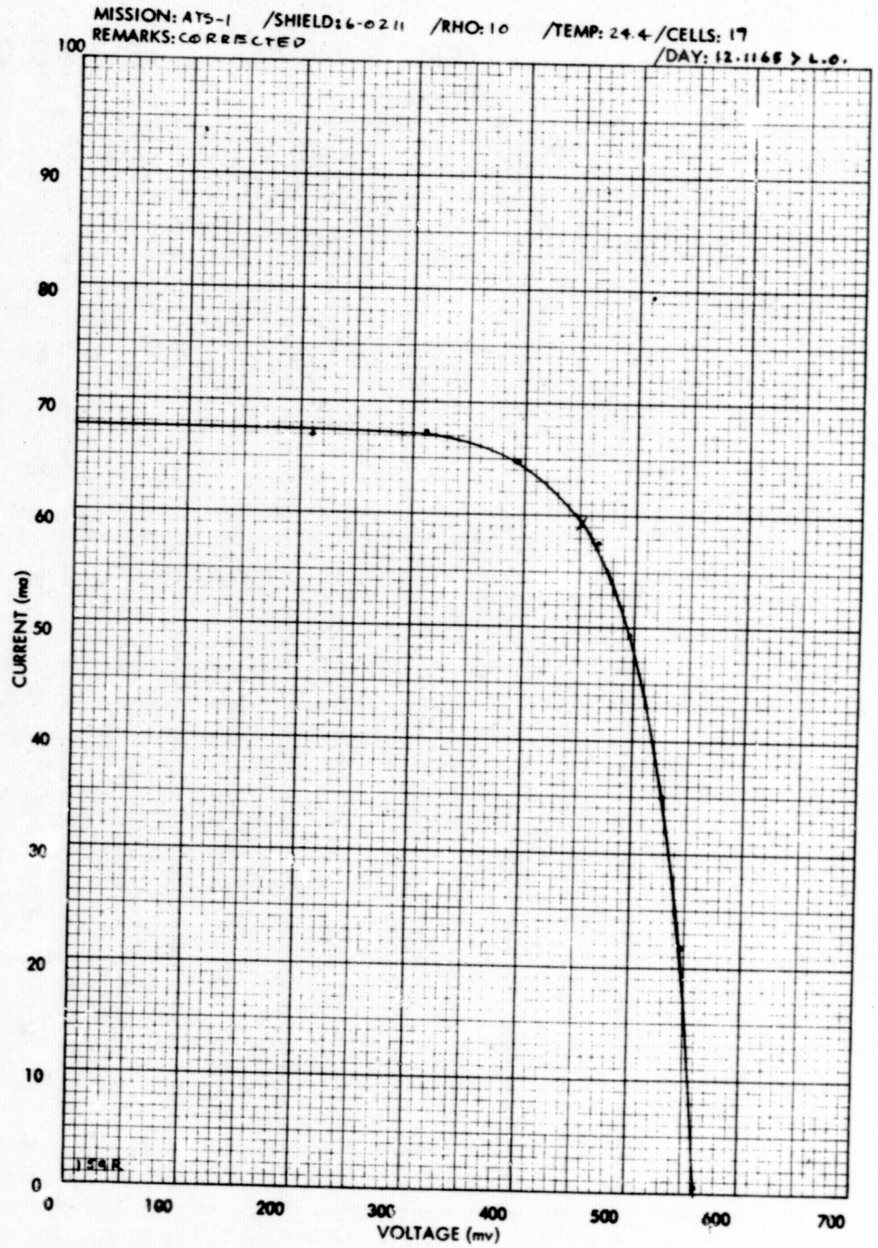
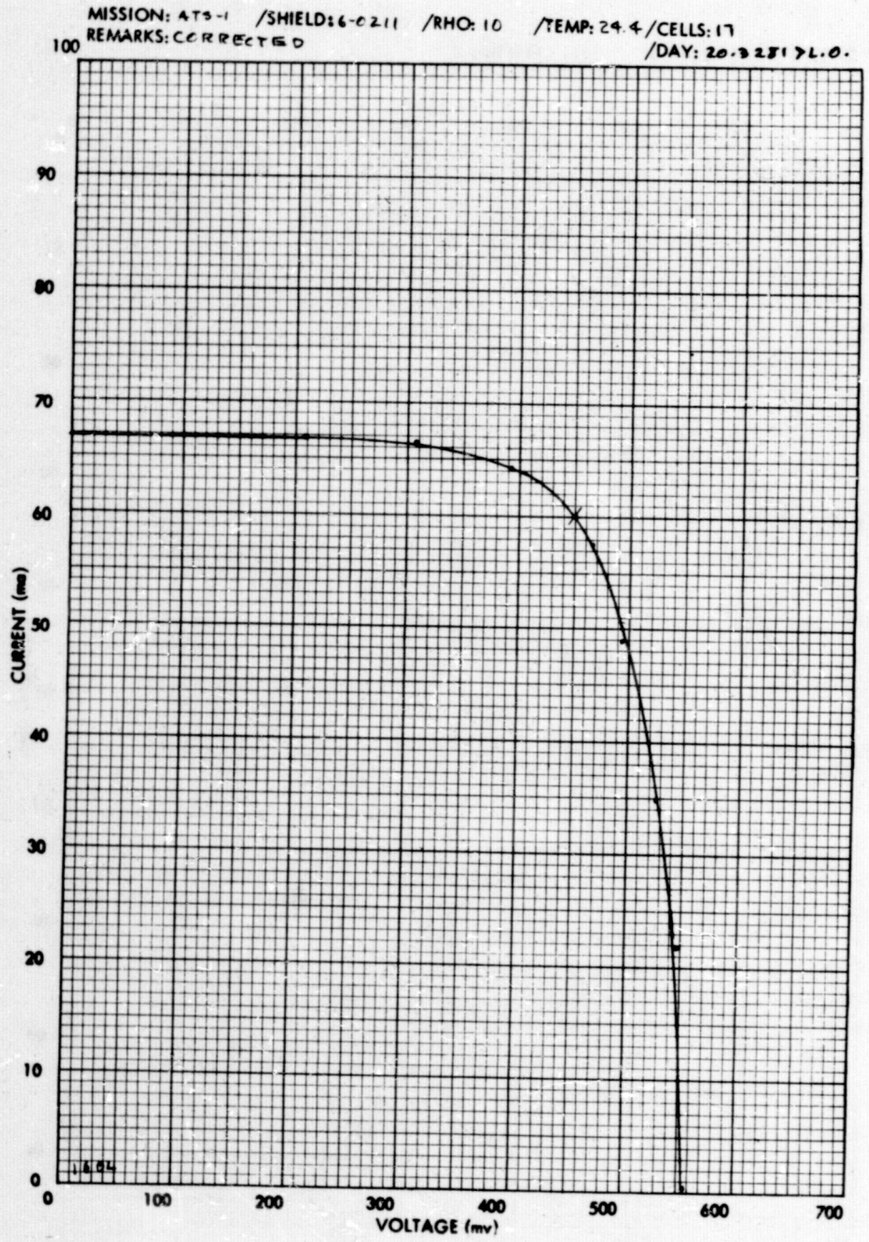
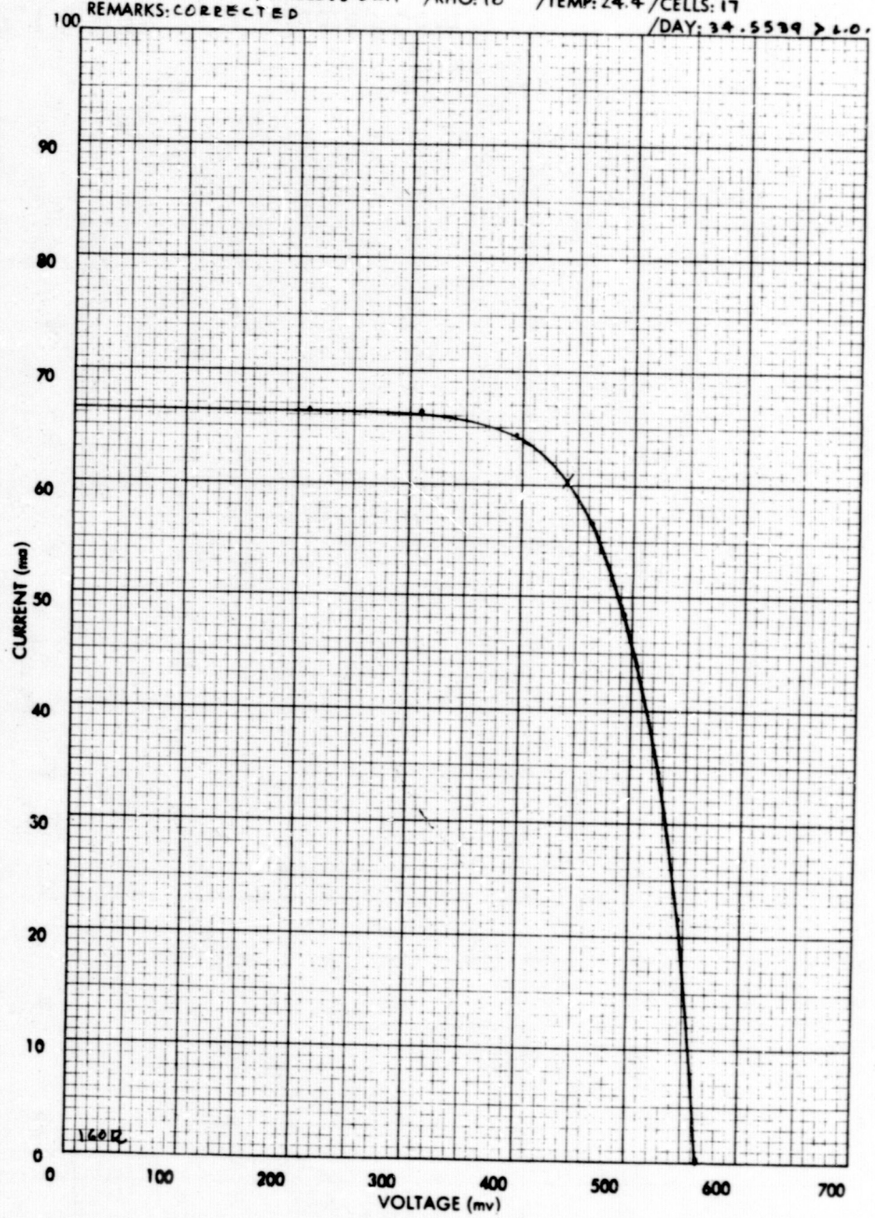


Figure 159. Cell 17, Days 7.1 and 12.1. Corrected Data





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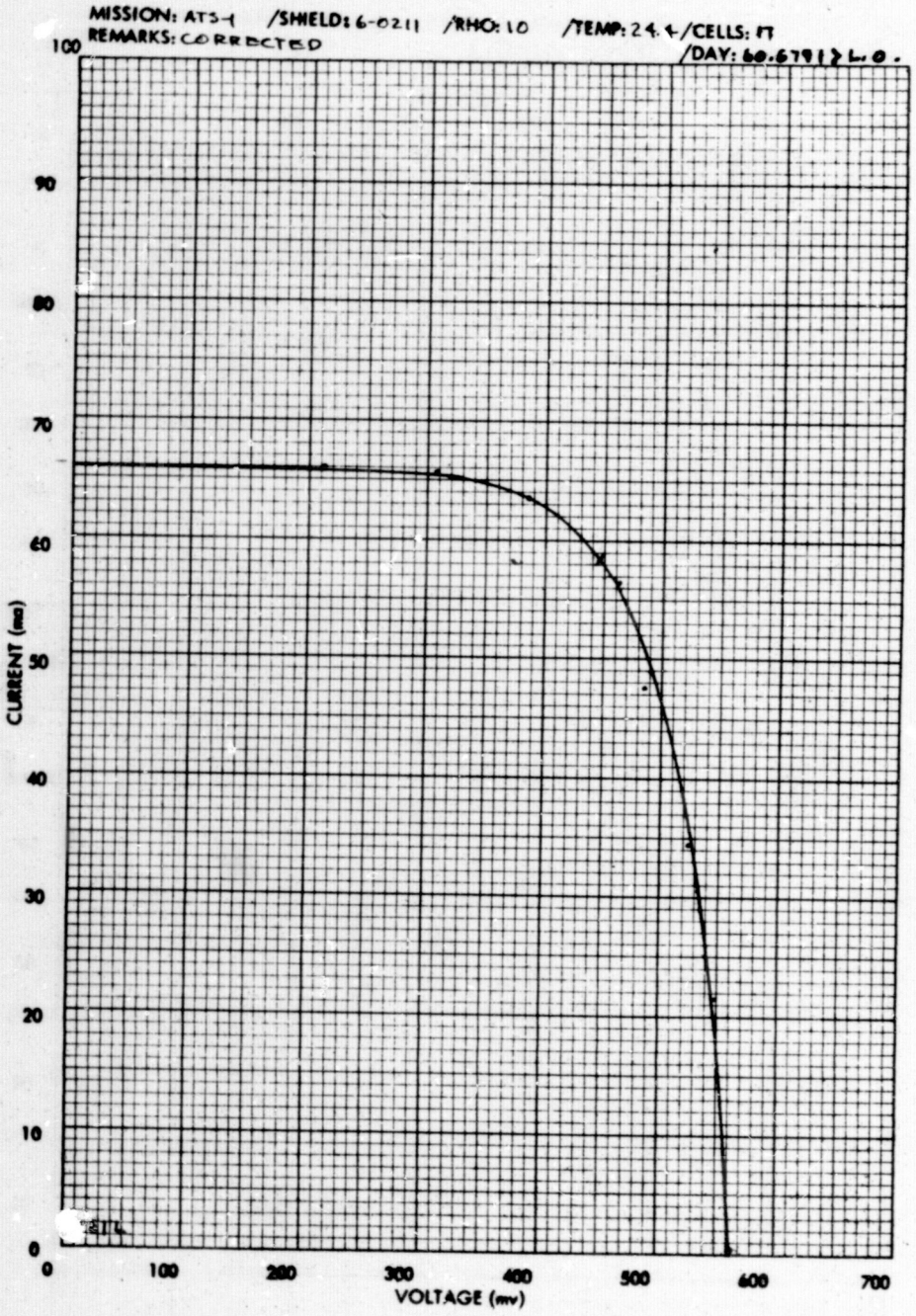


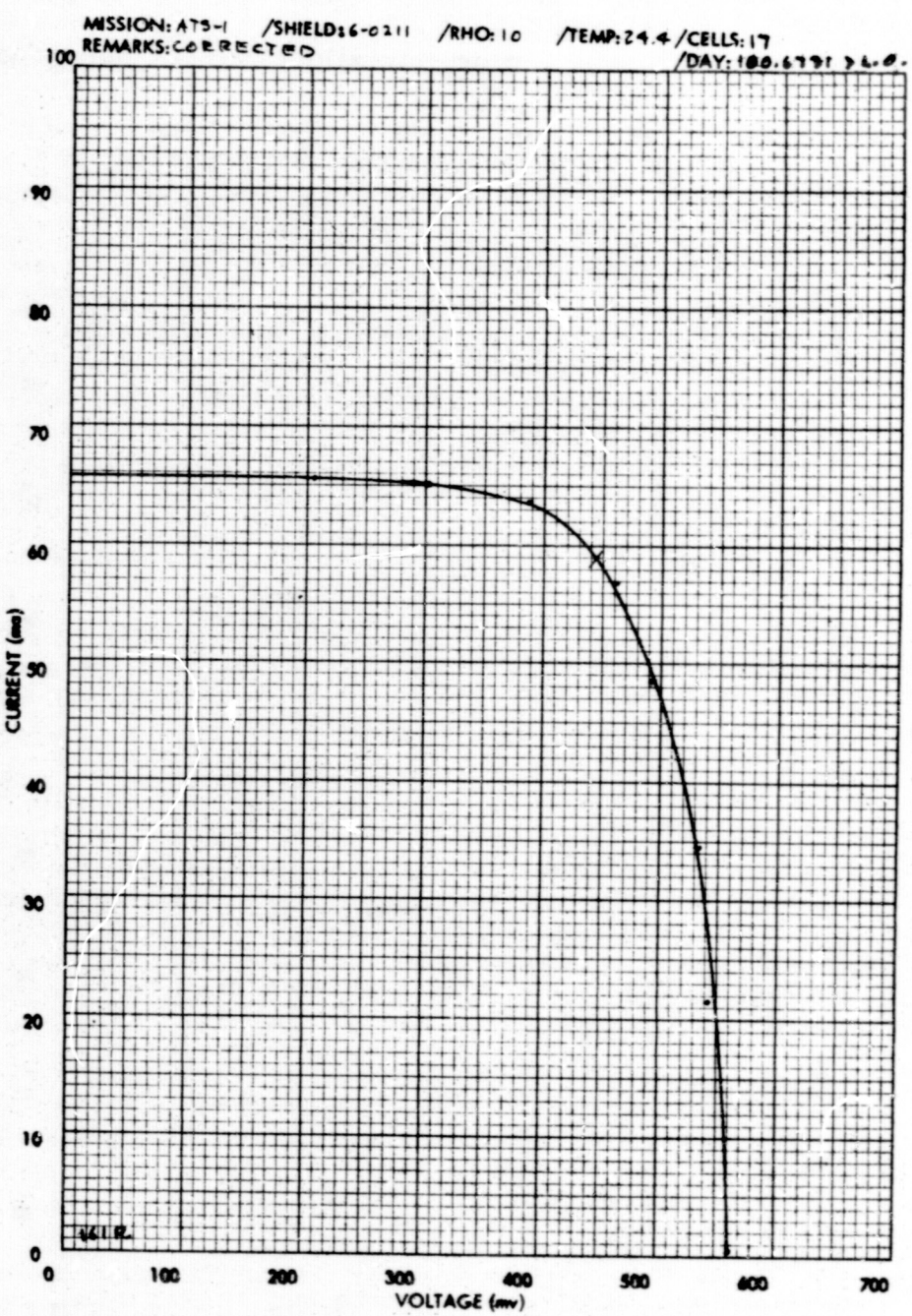
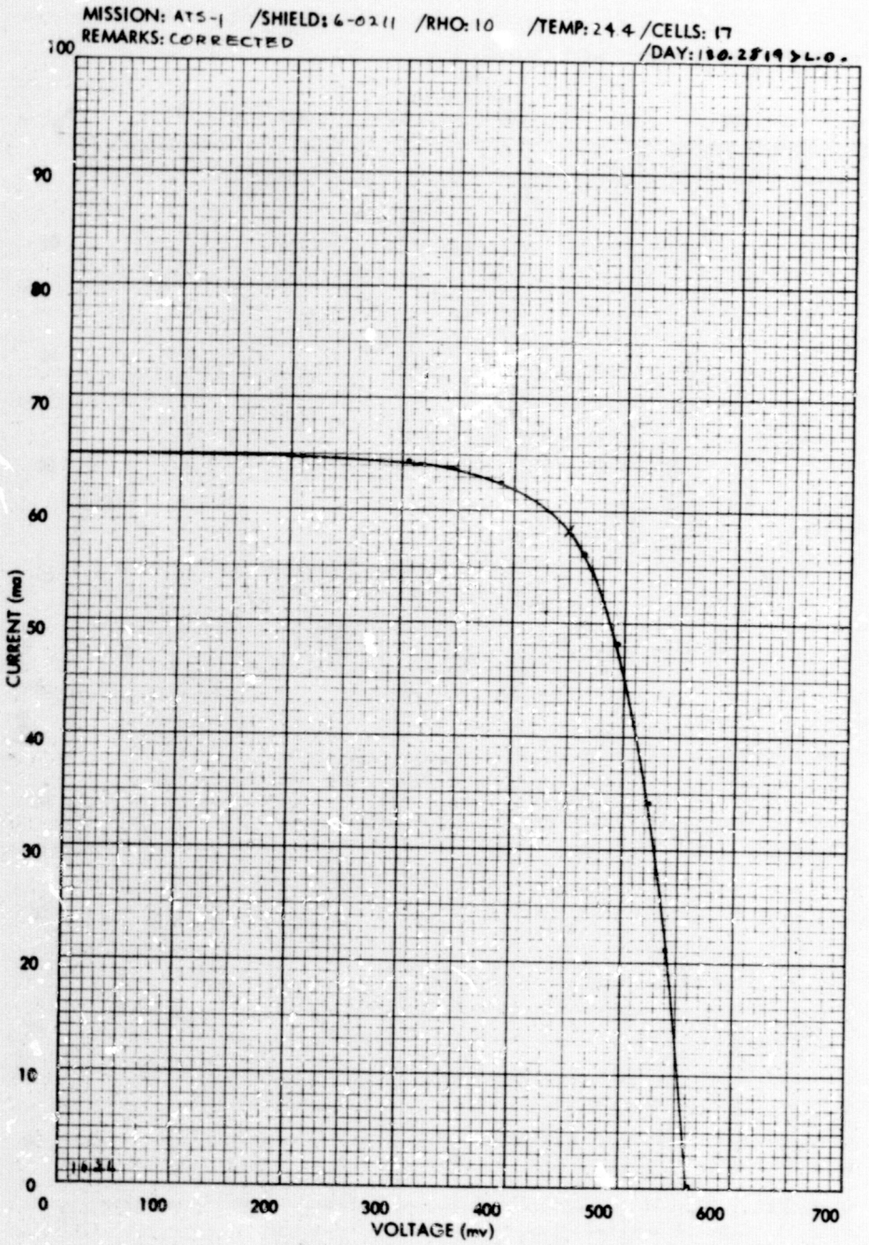


Figure 161. Cell 17, Days 60.6 and 100.6. Corrected Data



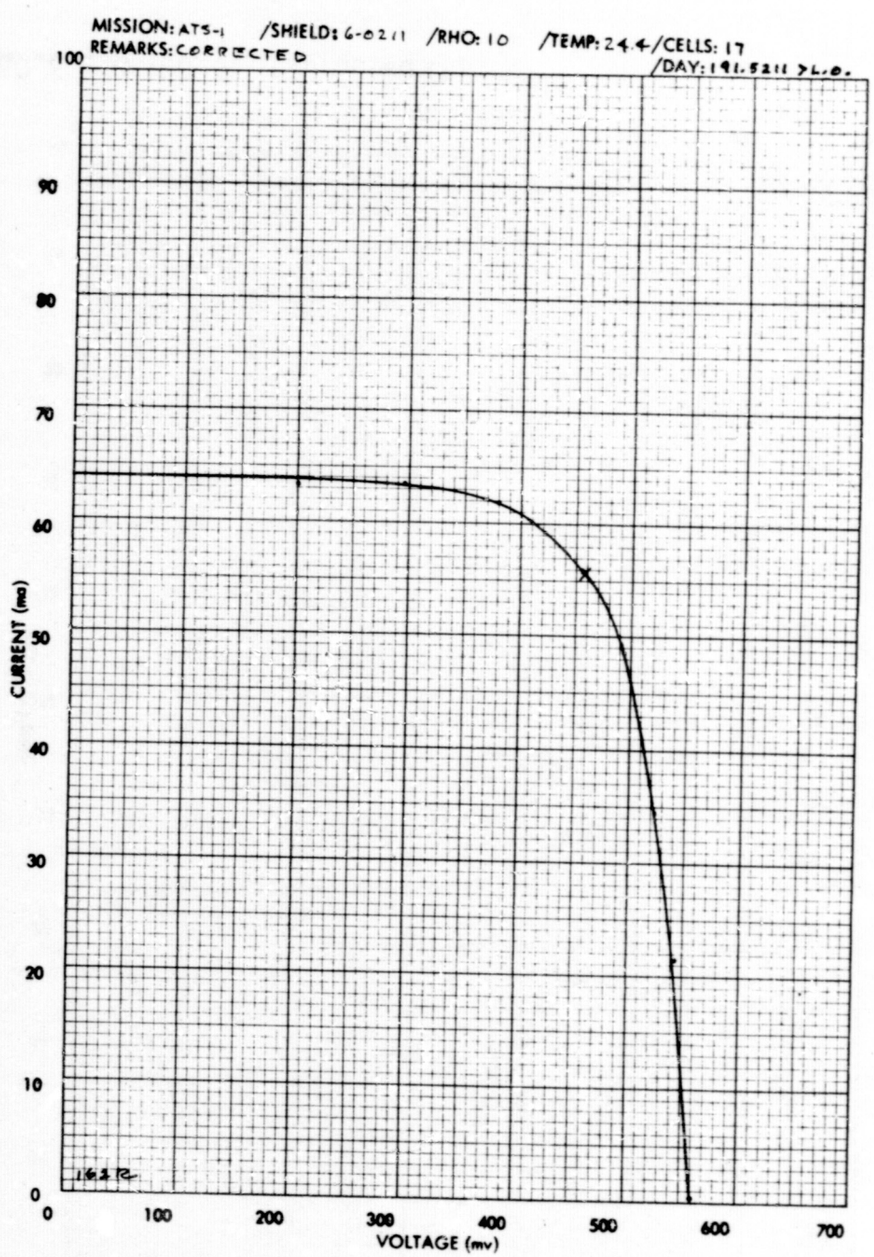
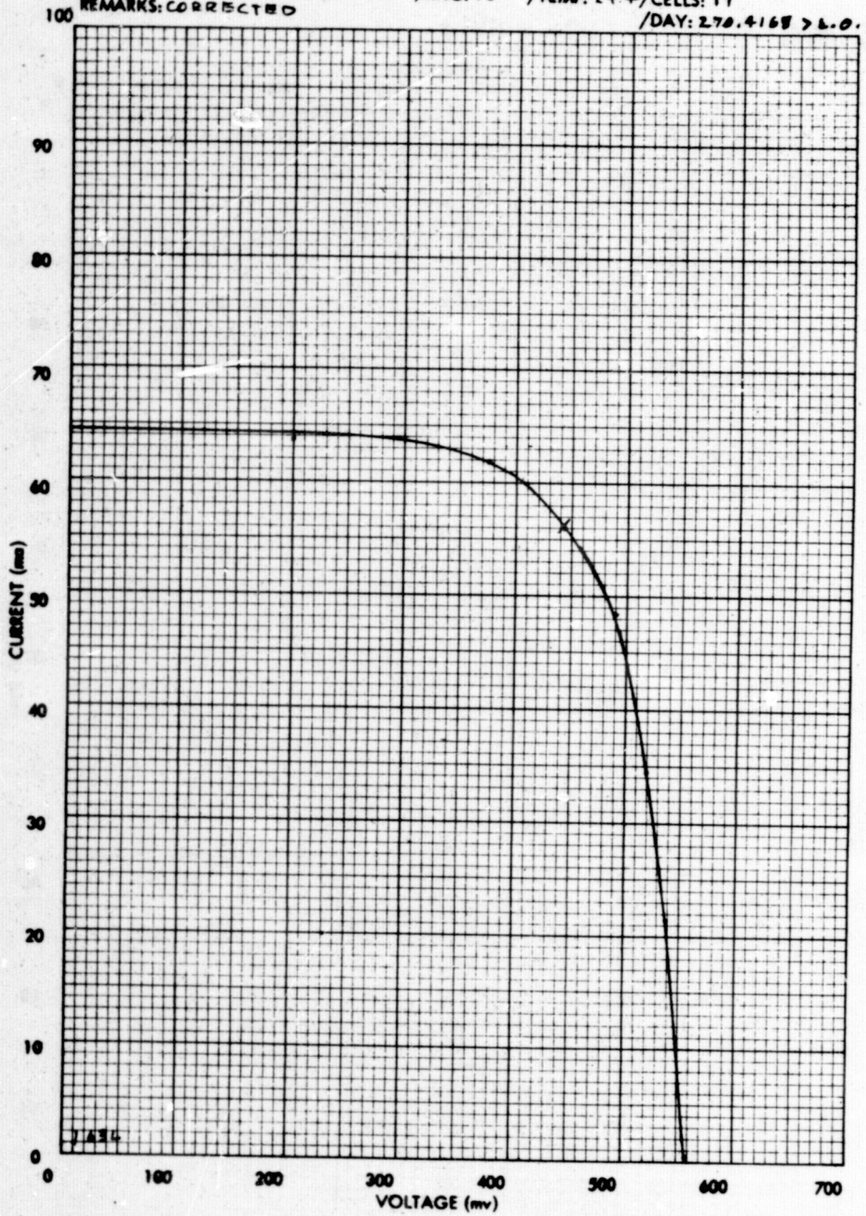


Figure 162. Cell 17, Days 130.2 and 191.5. Corrected Data



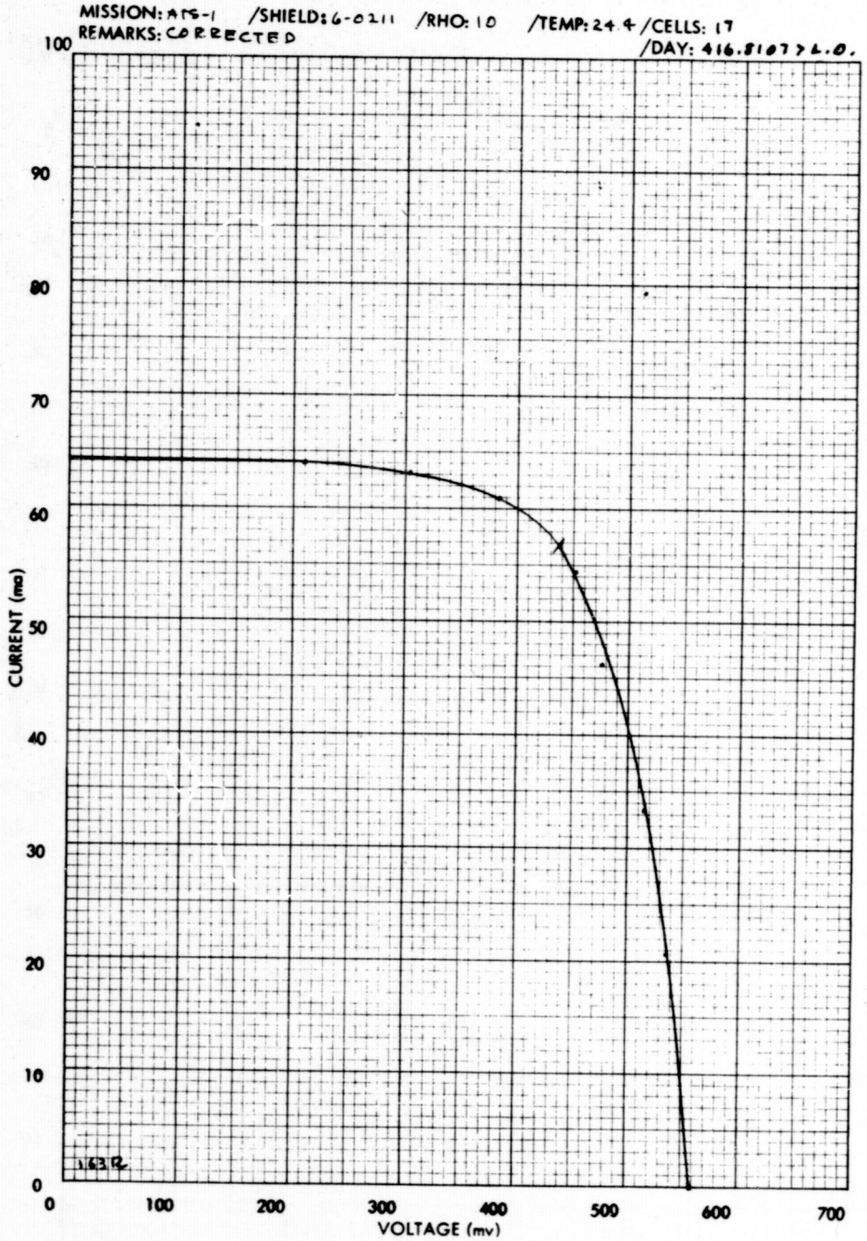
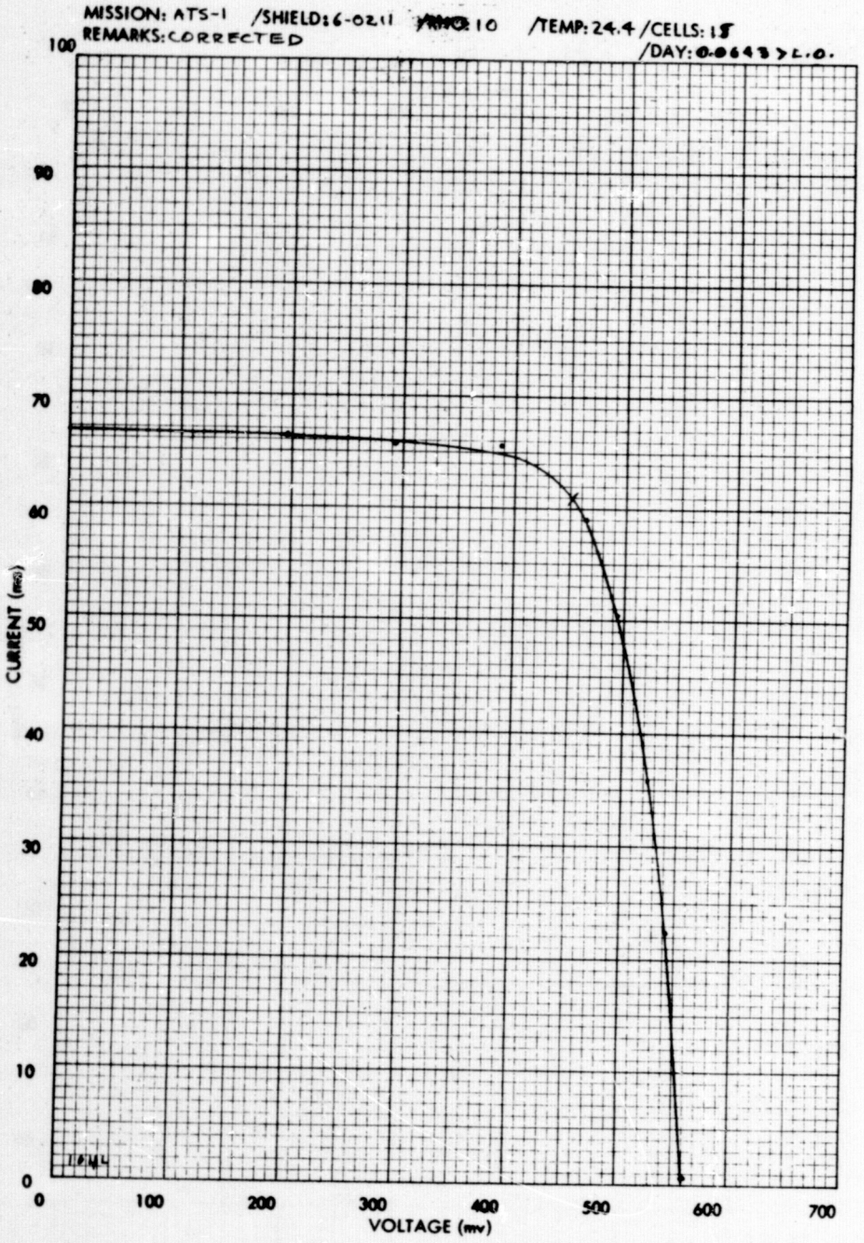


Figure 163. Cell 17, Days 270.4 and 416.8. Corrected Data



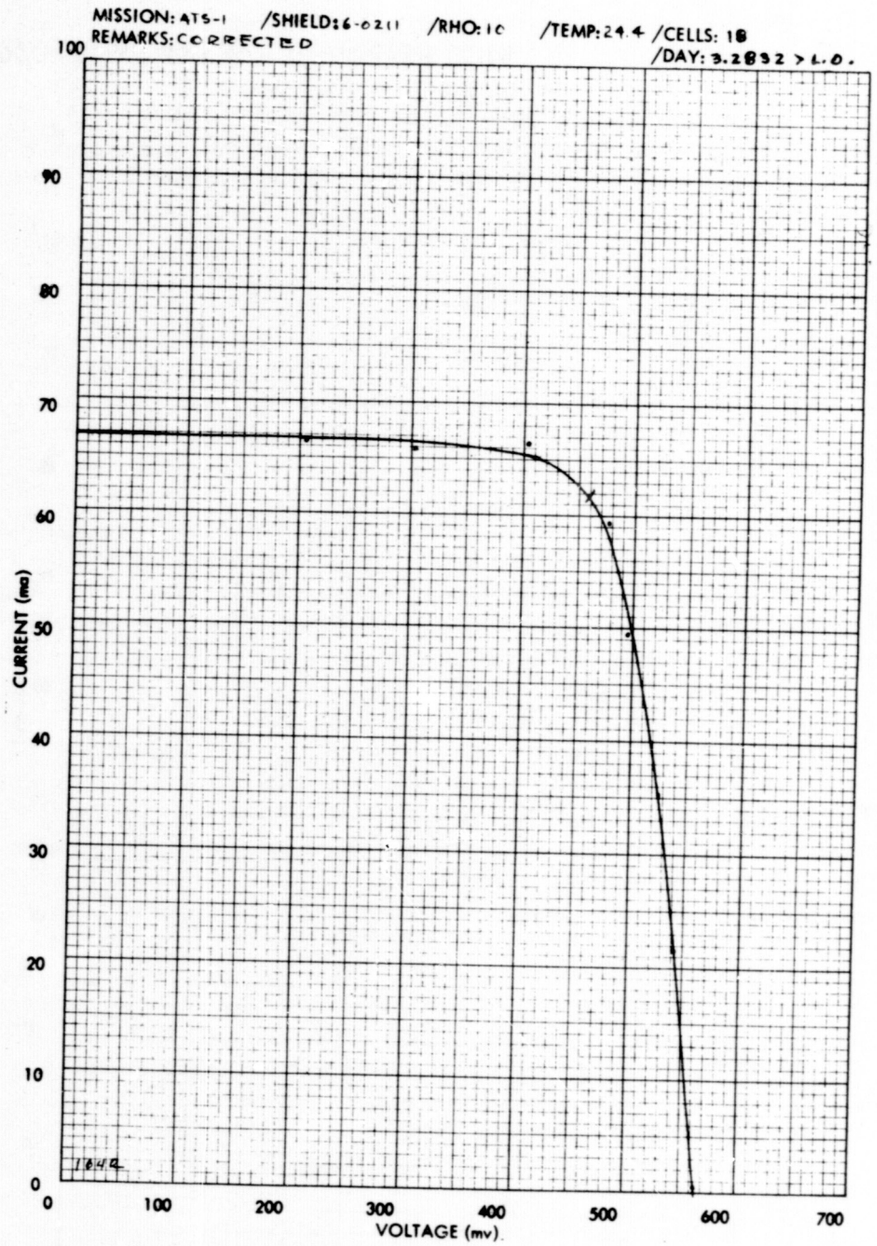
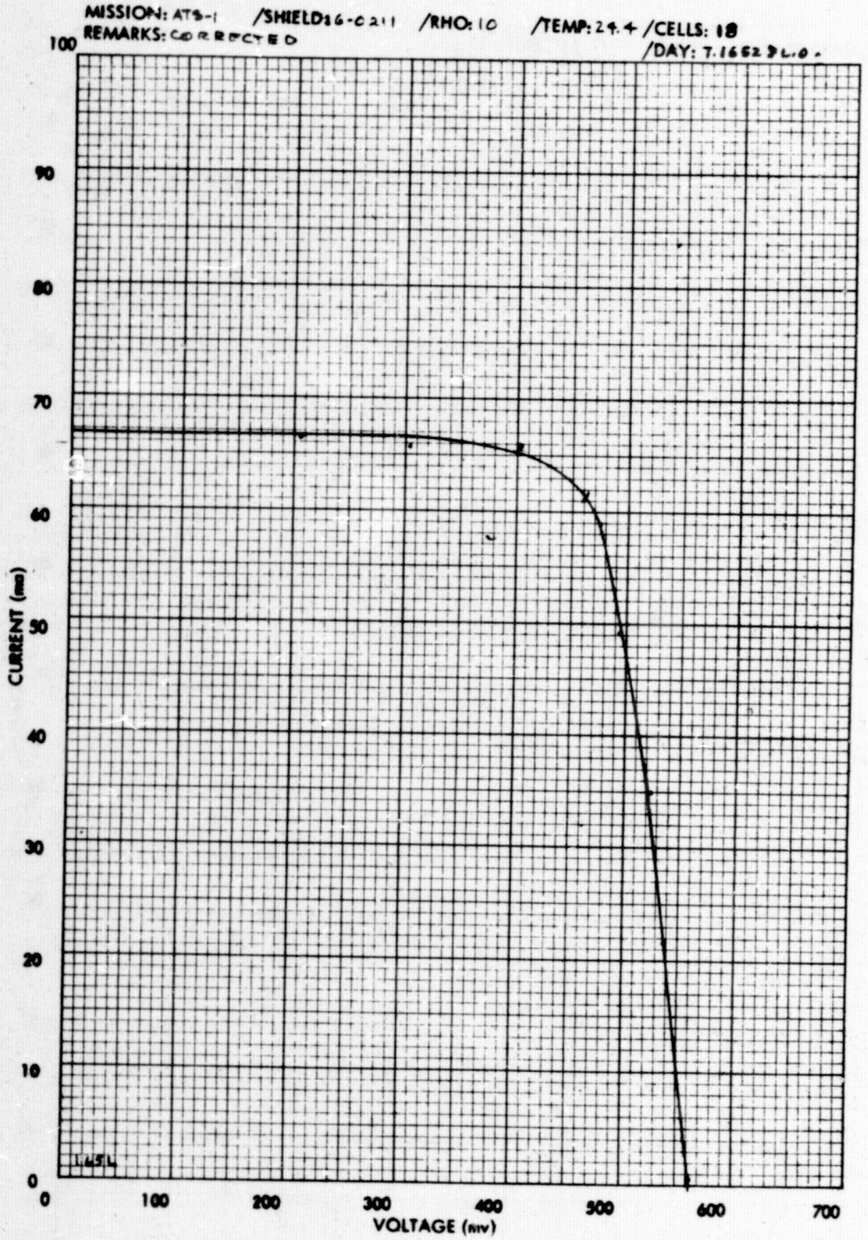


Figure 164. Cell 18, Days 0.064 and 3.2. Corrected Data



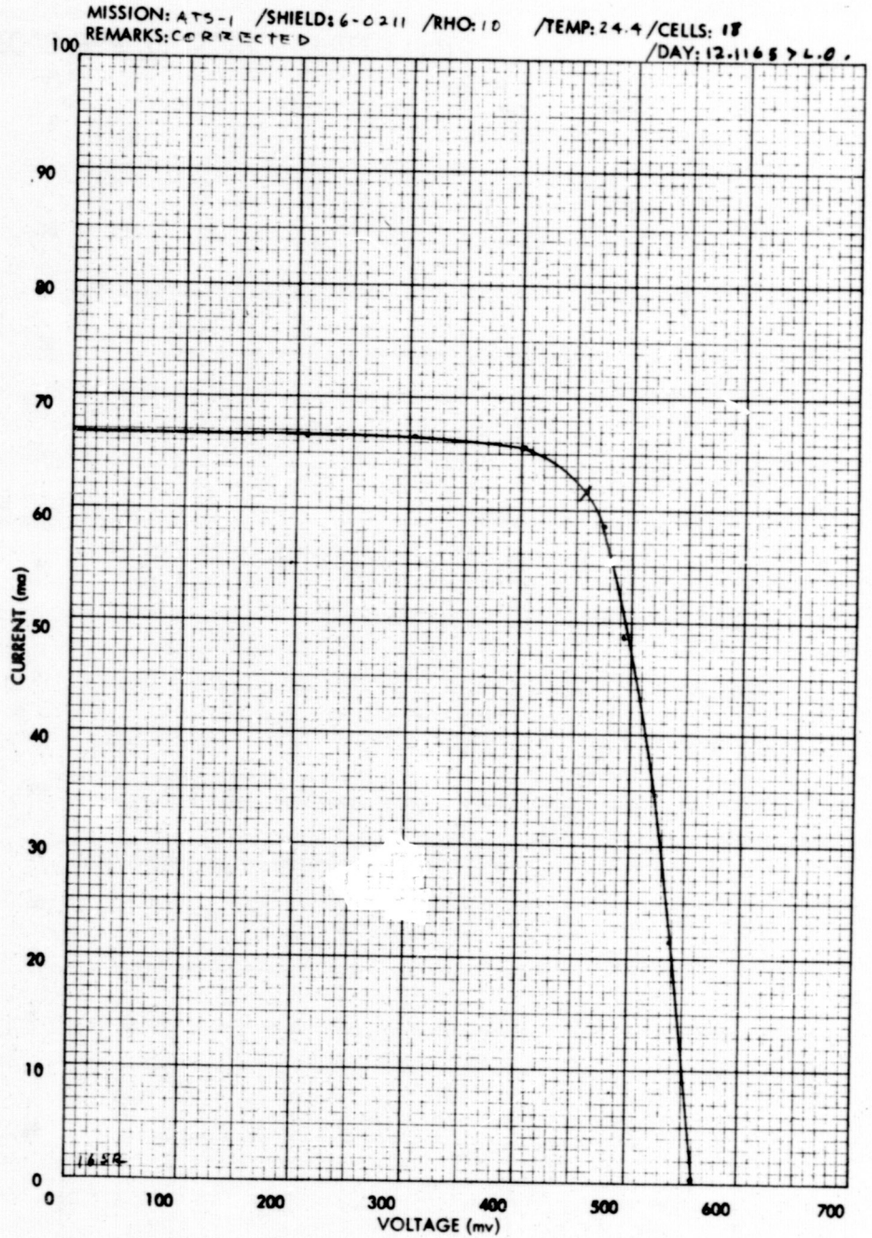


Figure 165. Cell 18, Days 7.1 and 12.1. Corrected Data

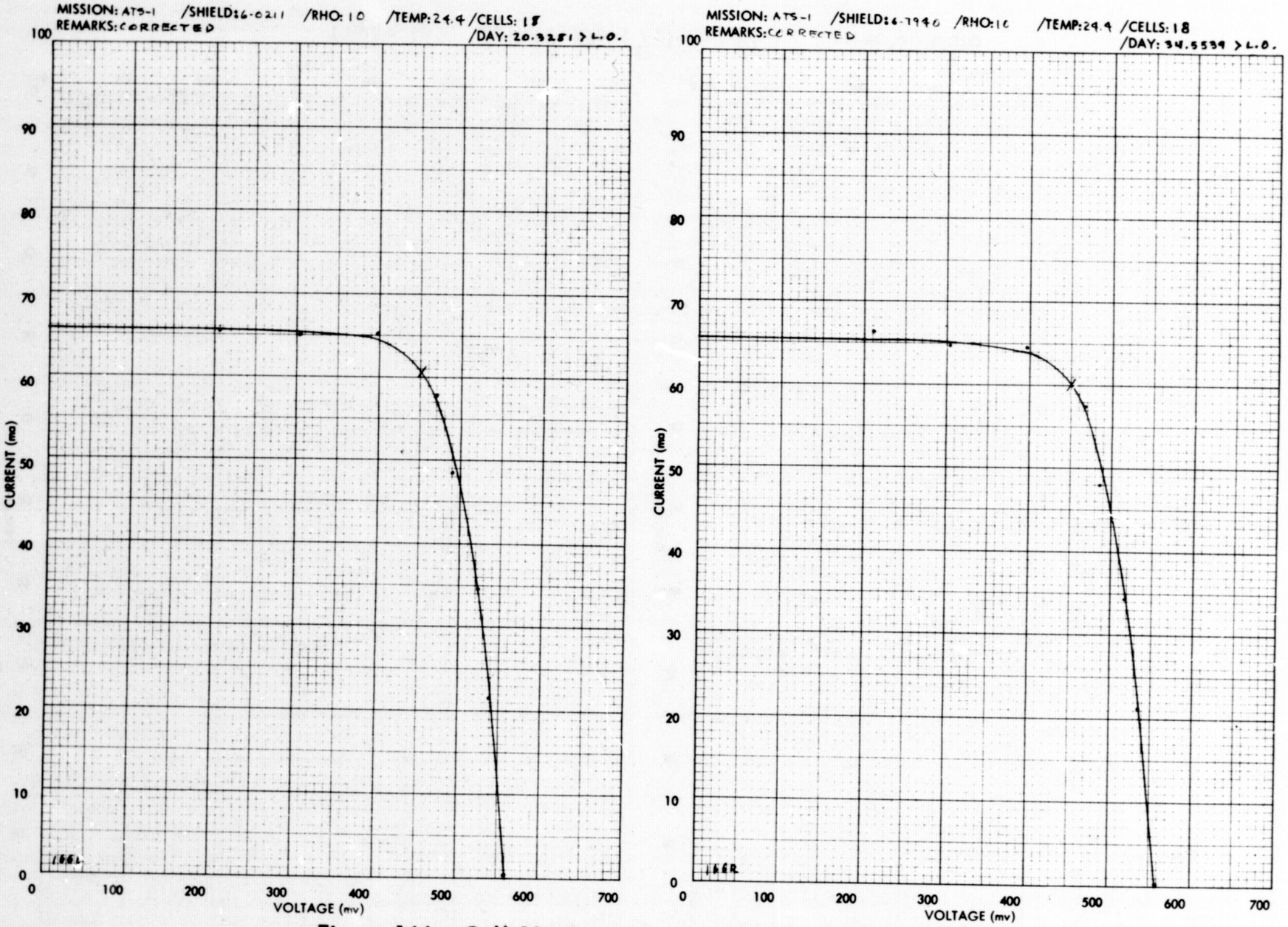


Figure 166. Cell 18, Days 20.3 and 34.5. Corrected Data

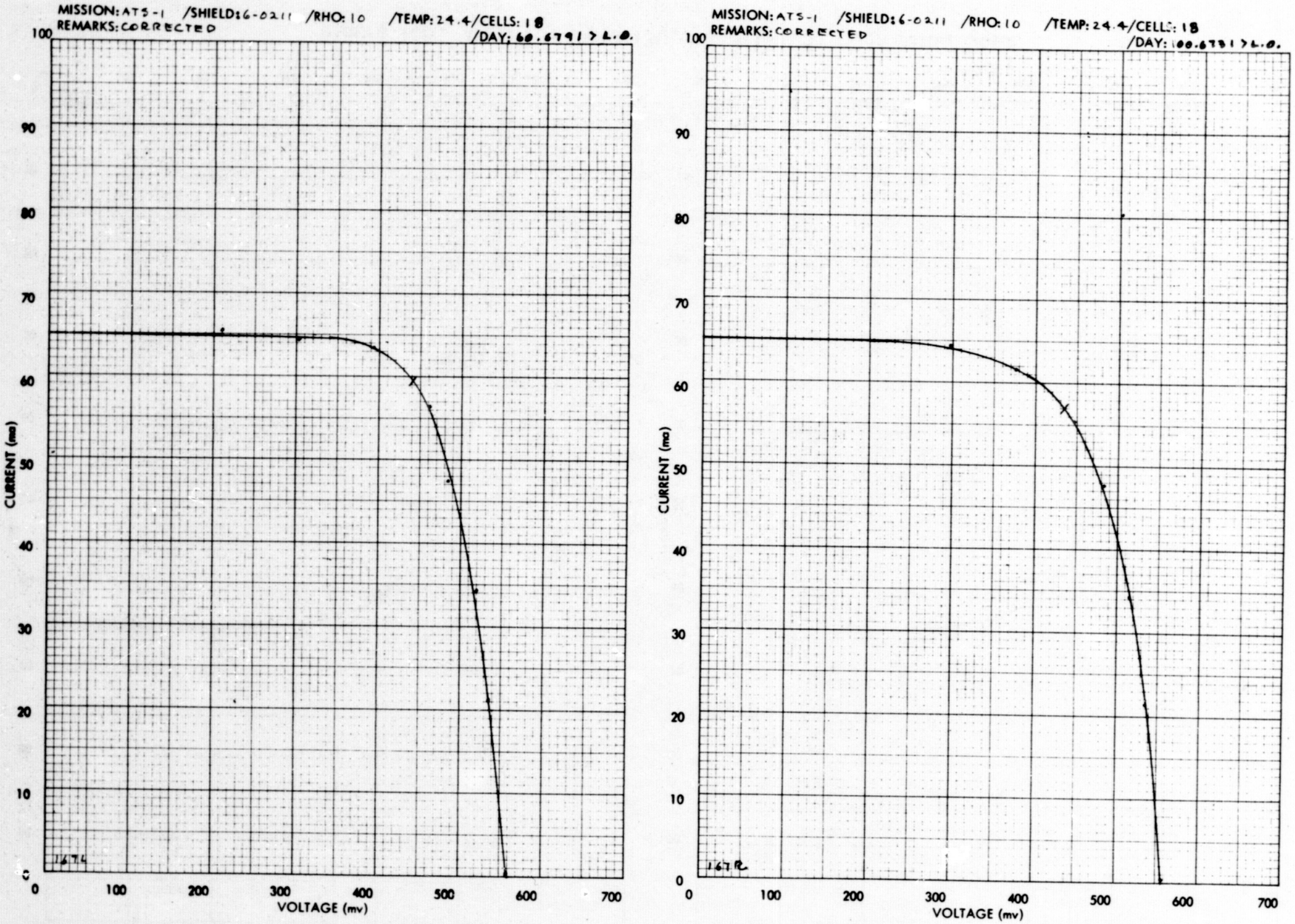
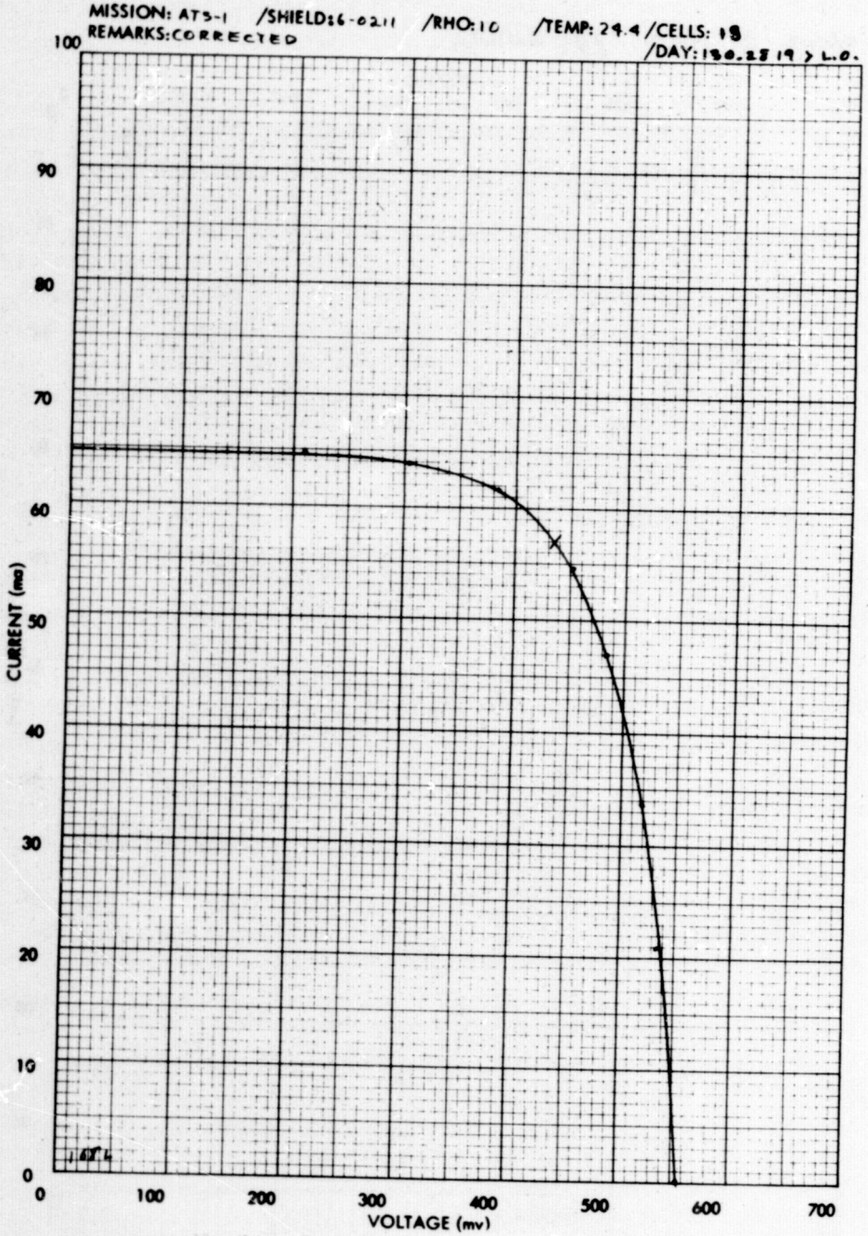


Figure 167. Cell 18, Days 60.6 and 100.6. Corrected Data



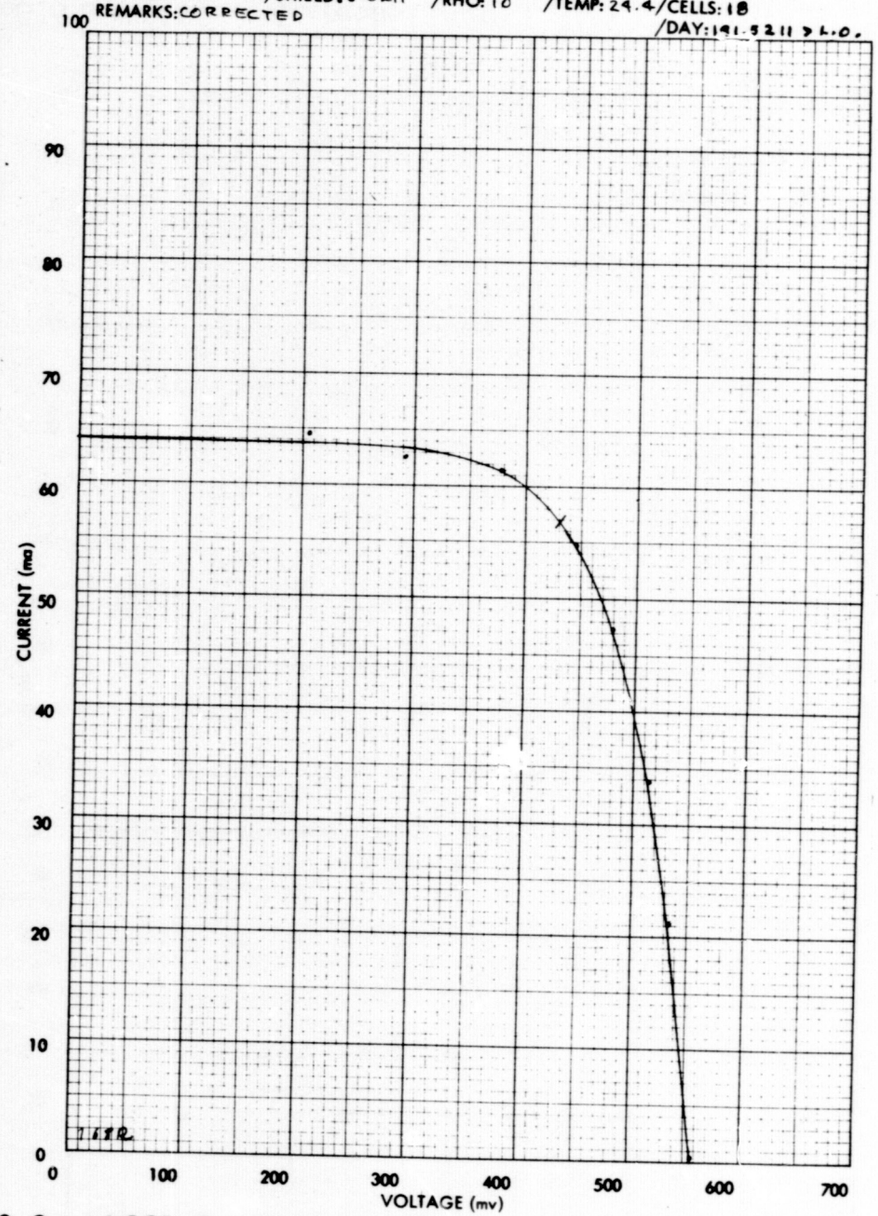
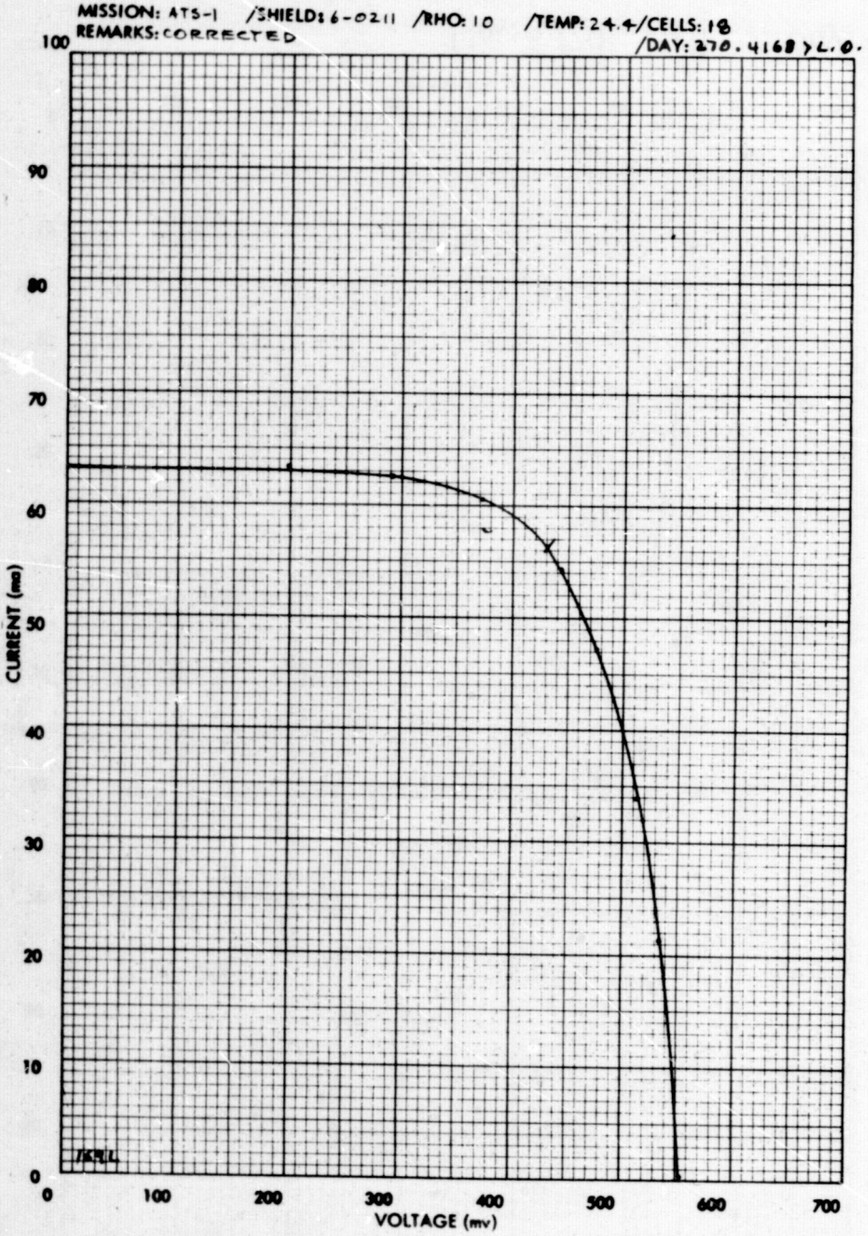


Figure 168. Cell 18, Days 130.2 and 191.5. Corrected Data



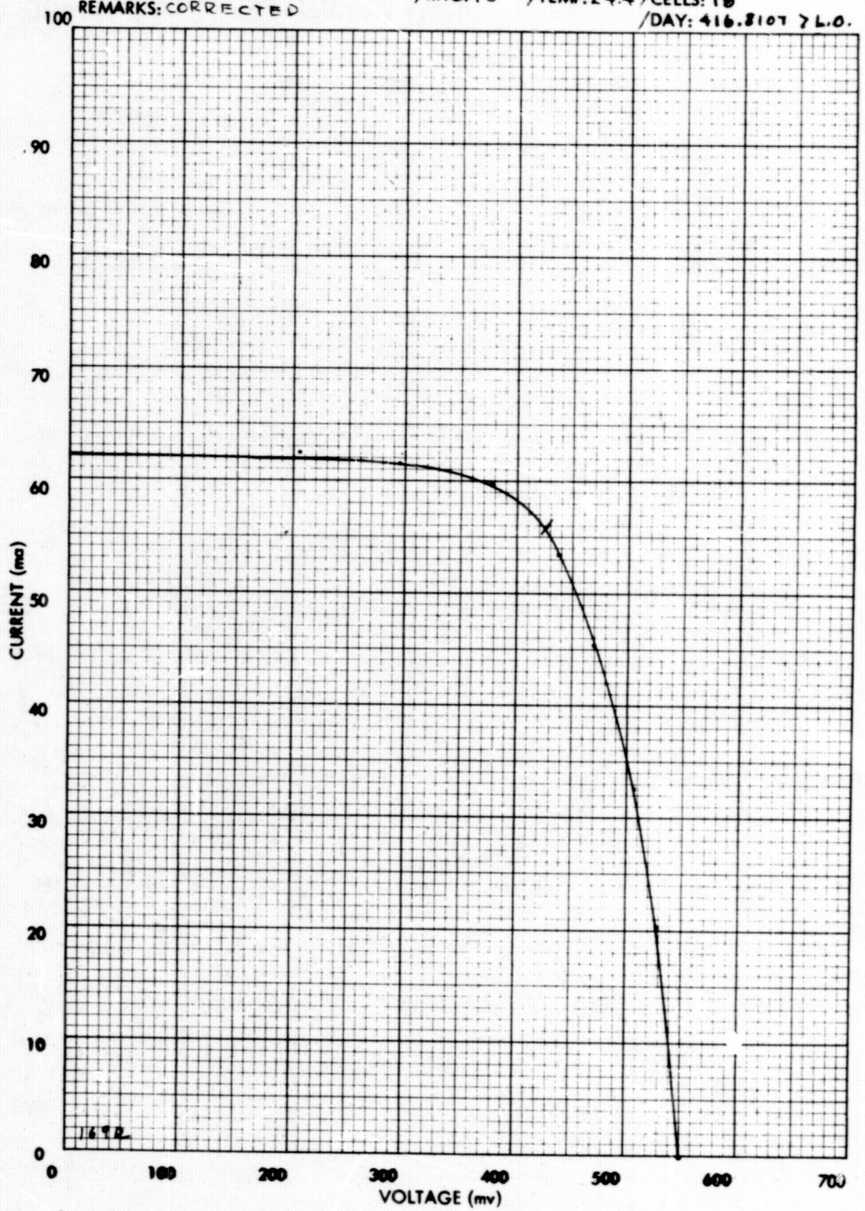


Figure 169. Cell 18, Days 270.4 and 416.8. Corrected Data

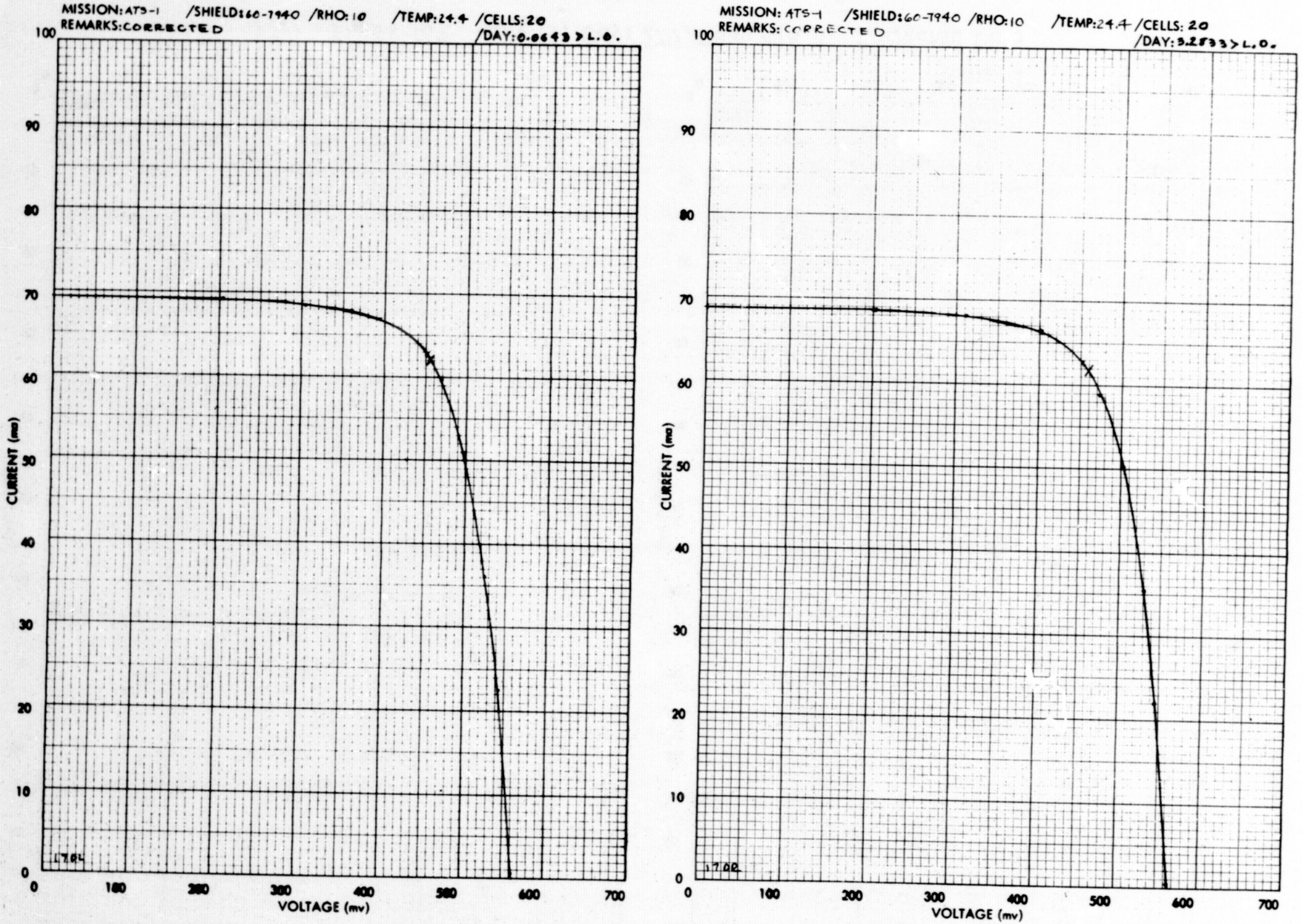
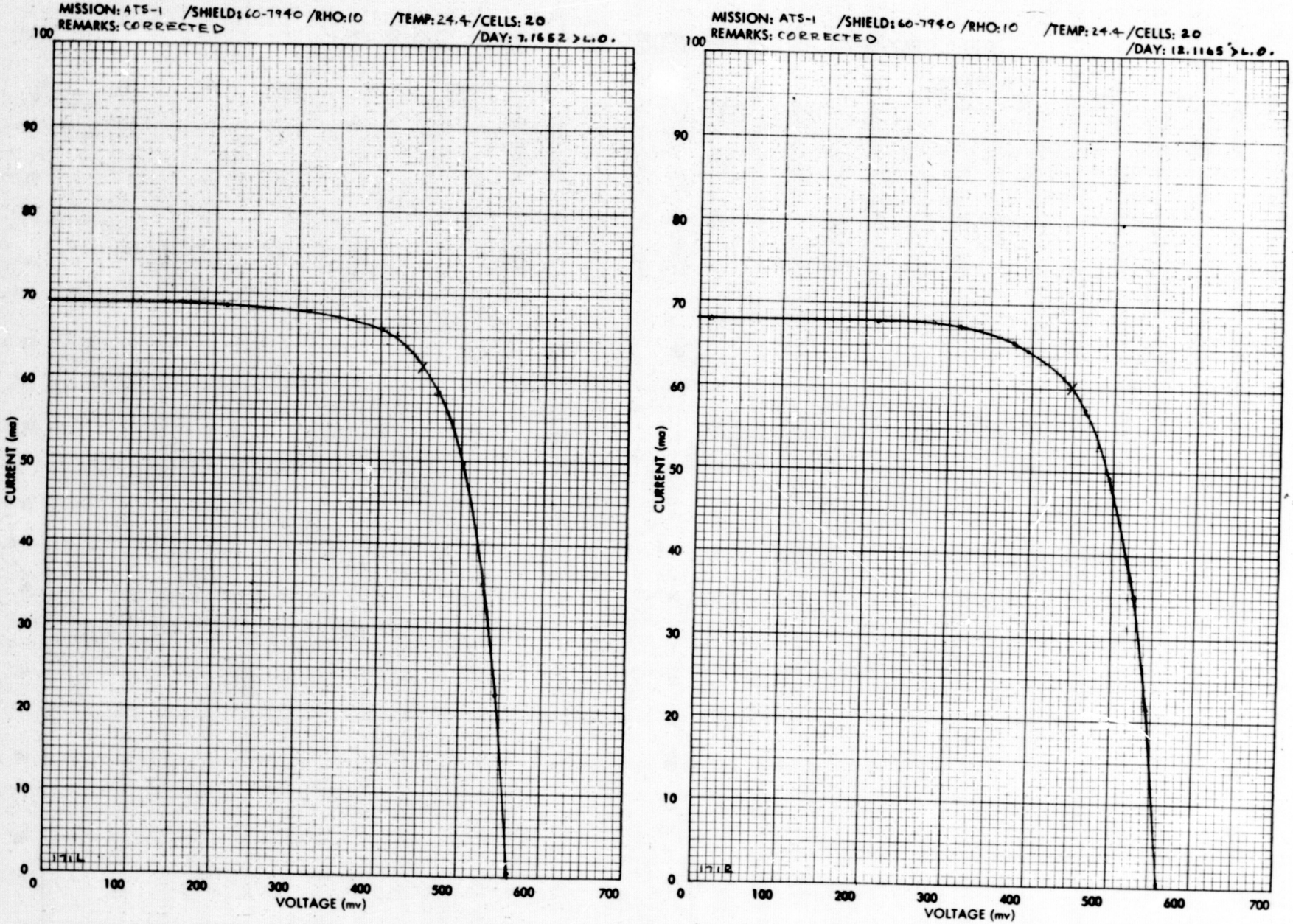


Figure 170. Cell 20, Days 0.064 and 3.2. Corrected Data



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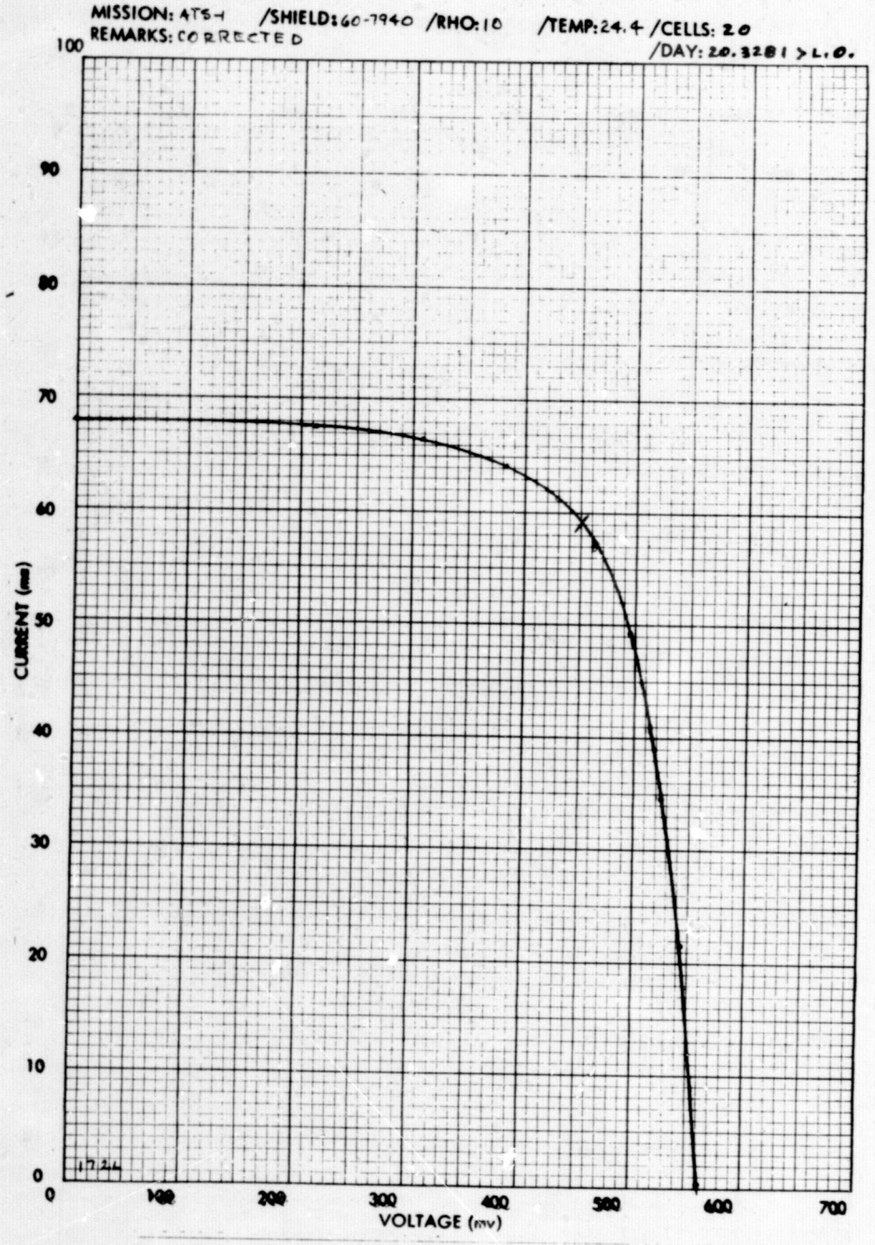


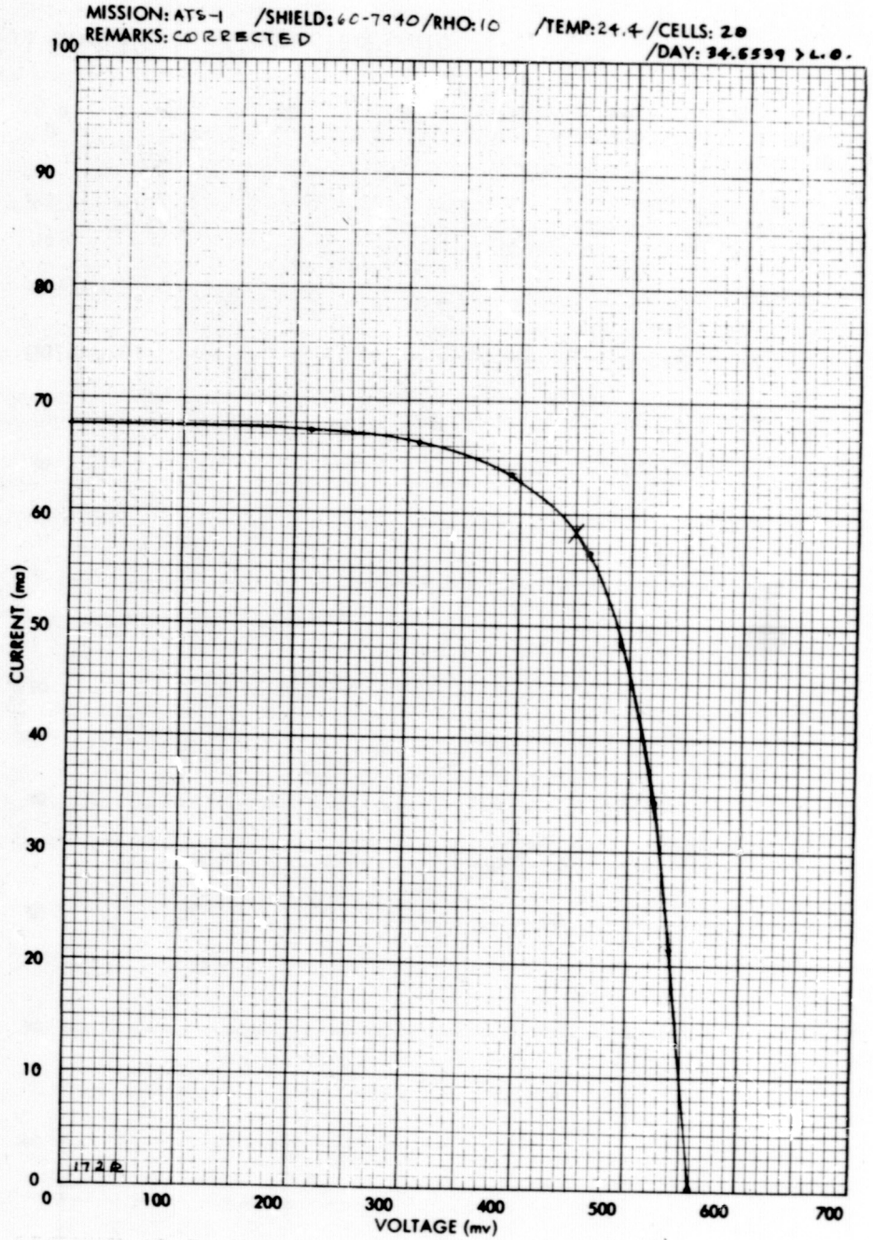
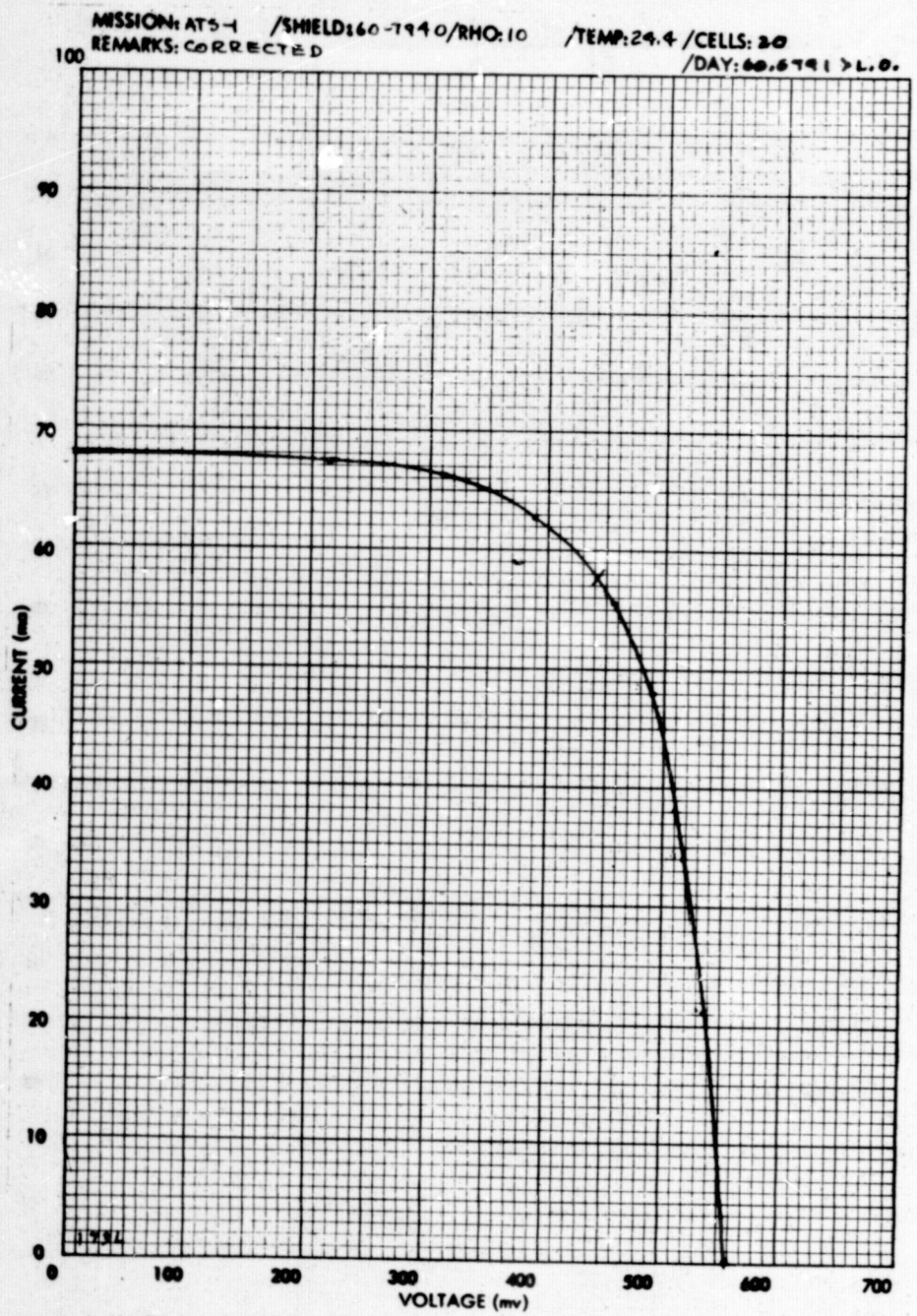


Figure 172. Cell 20, Days 20.3 and 34.5. Corrected Data



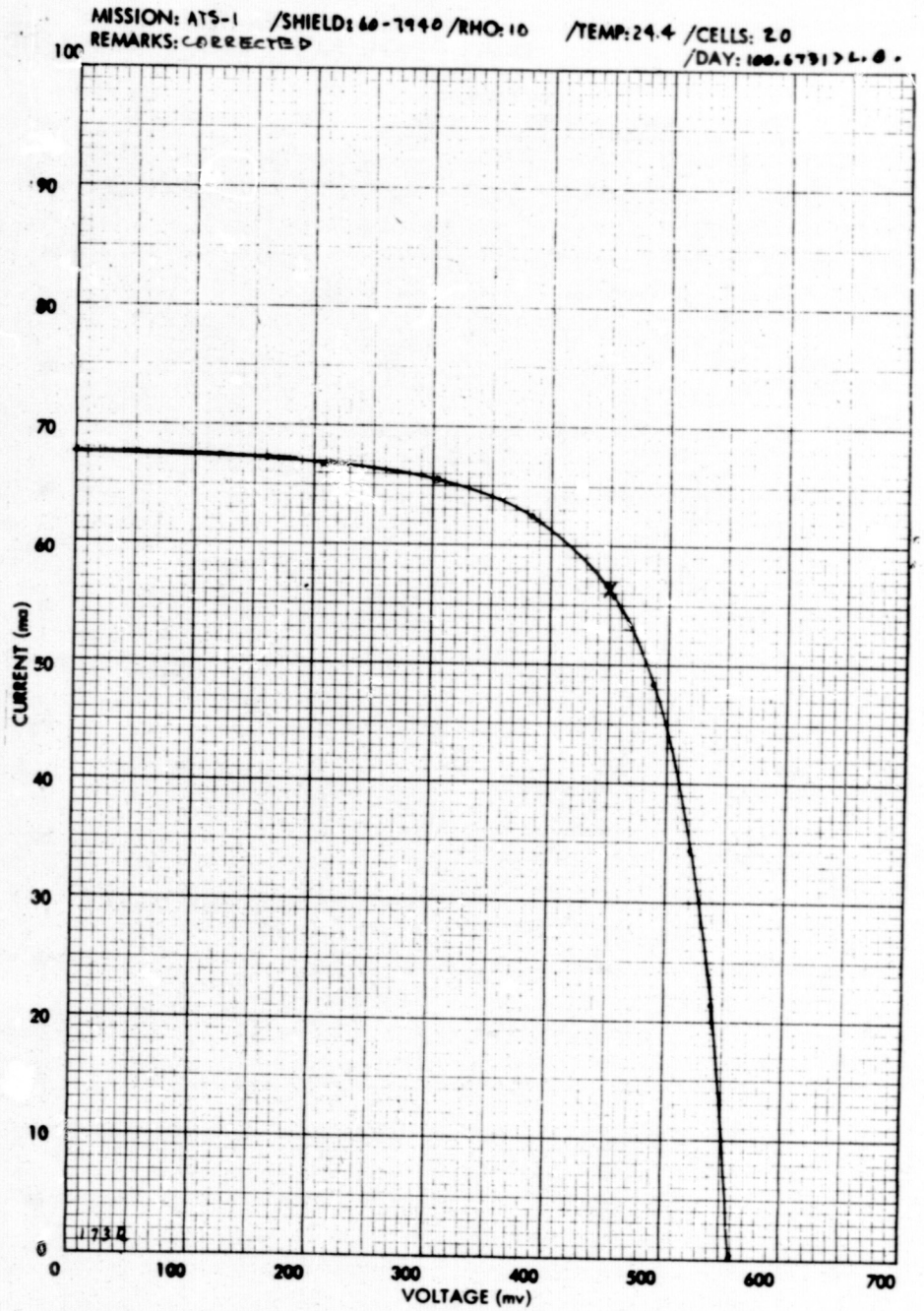
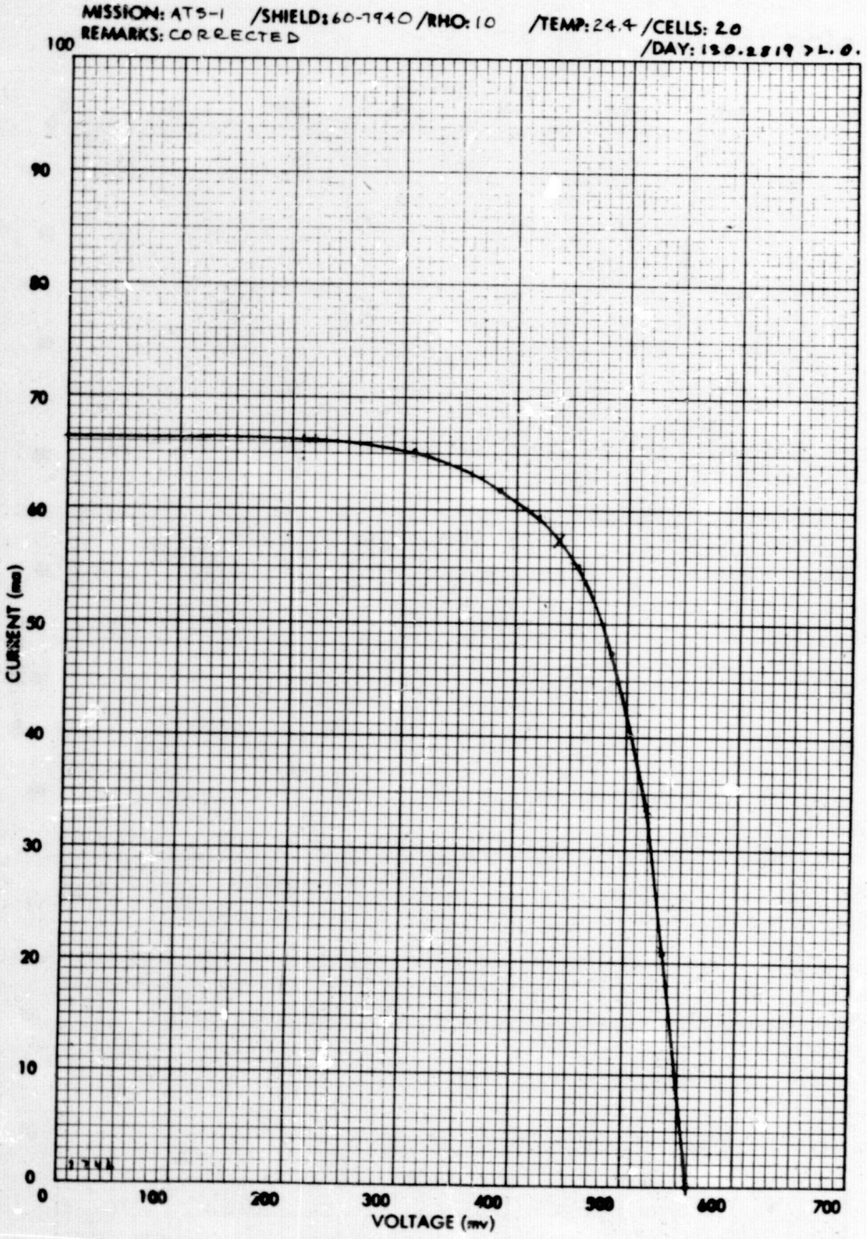


Figure 173. Cell 20, Days 60.6 and 100.6. Corrected Data.



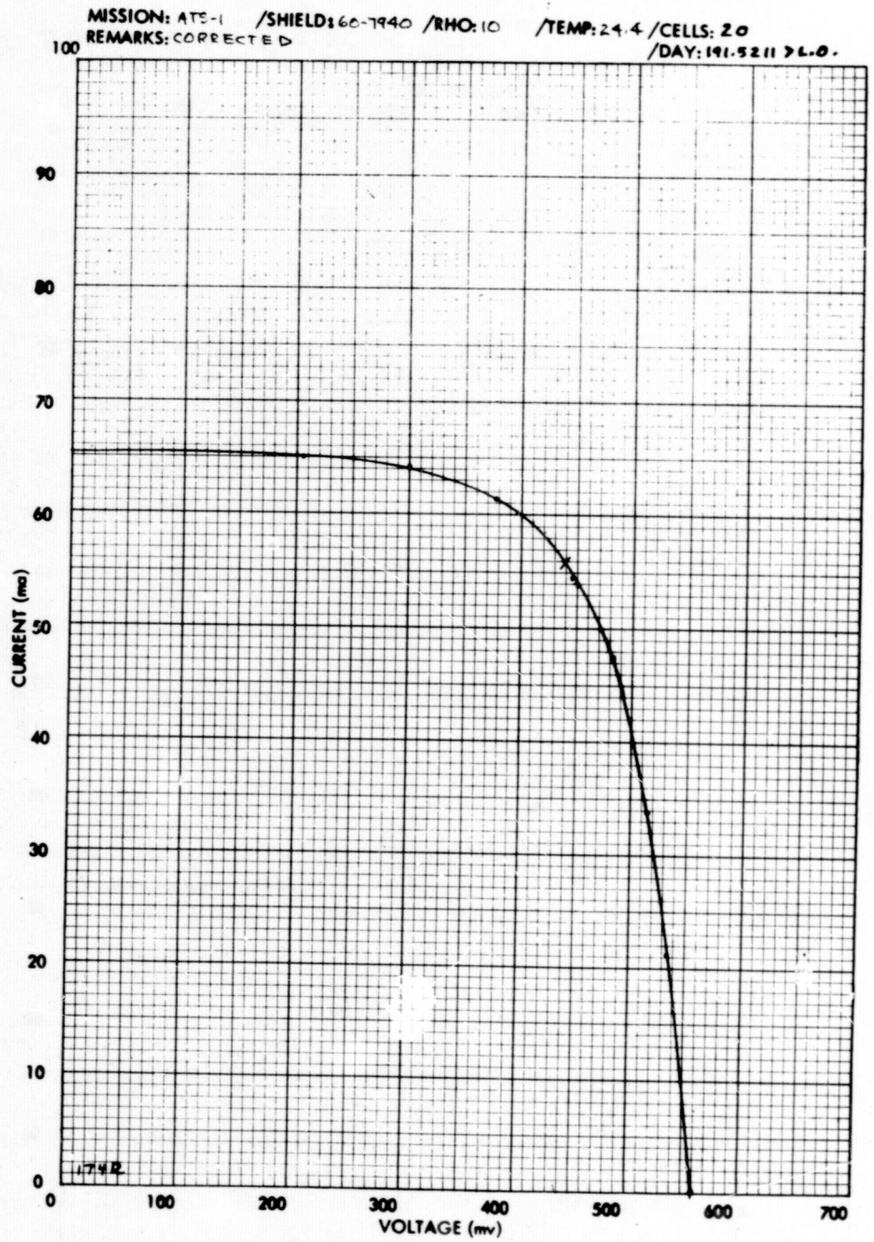
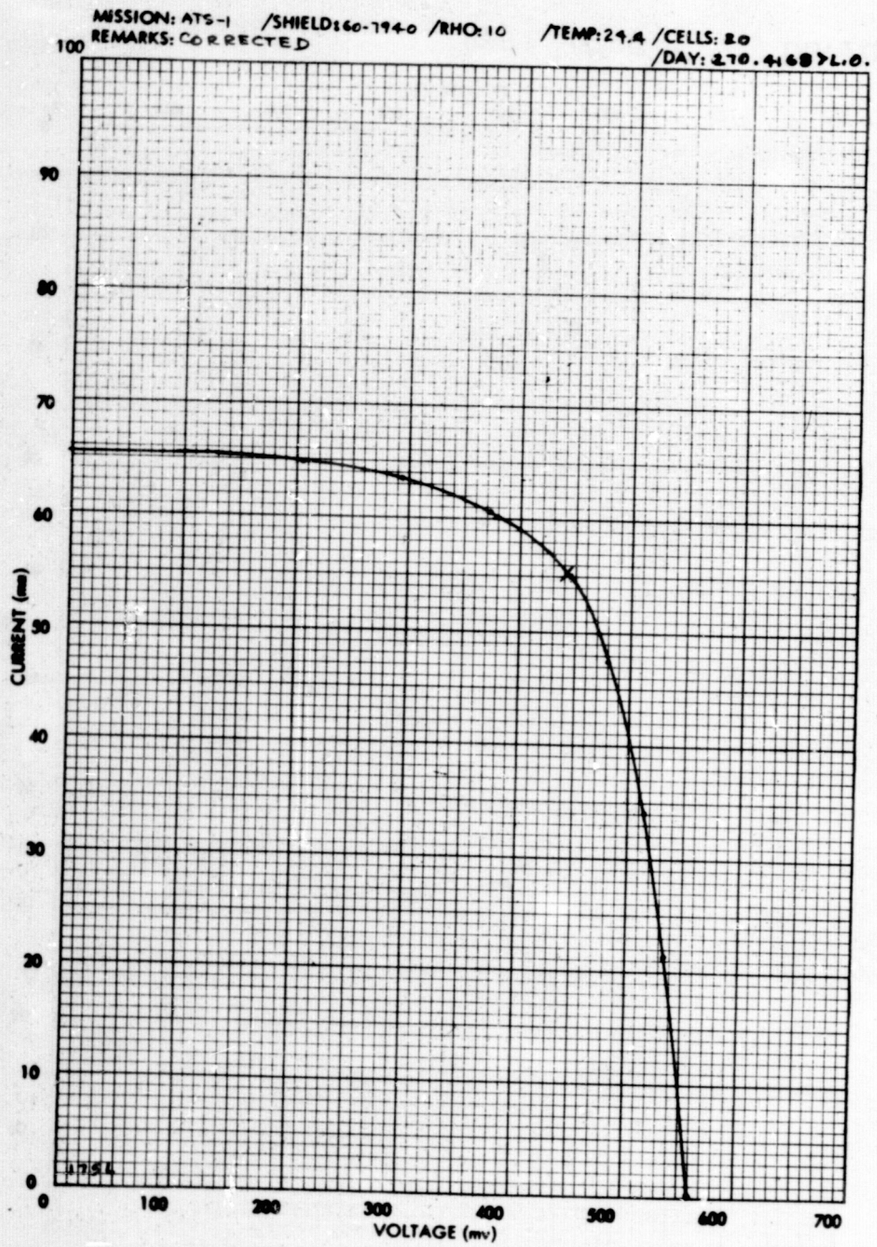


Figure 174. Cell 20, Days 130.2 and 191.5. Corrected Data



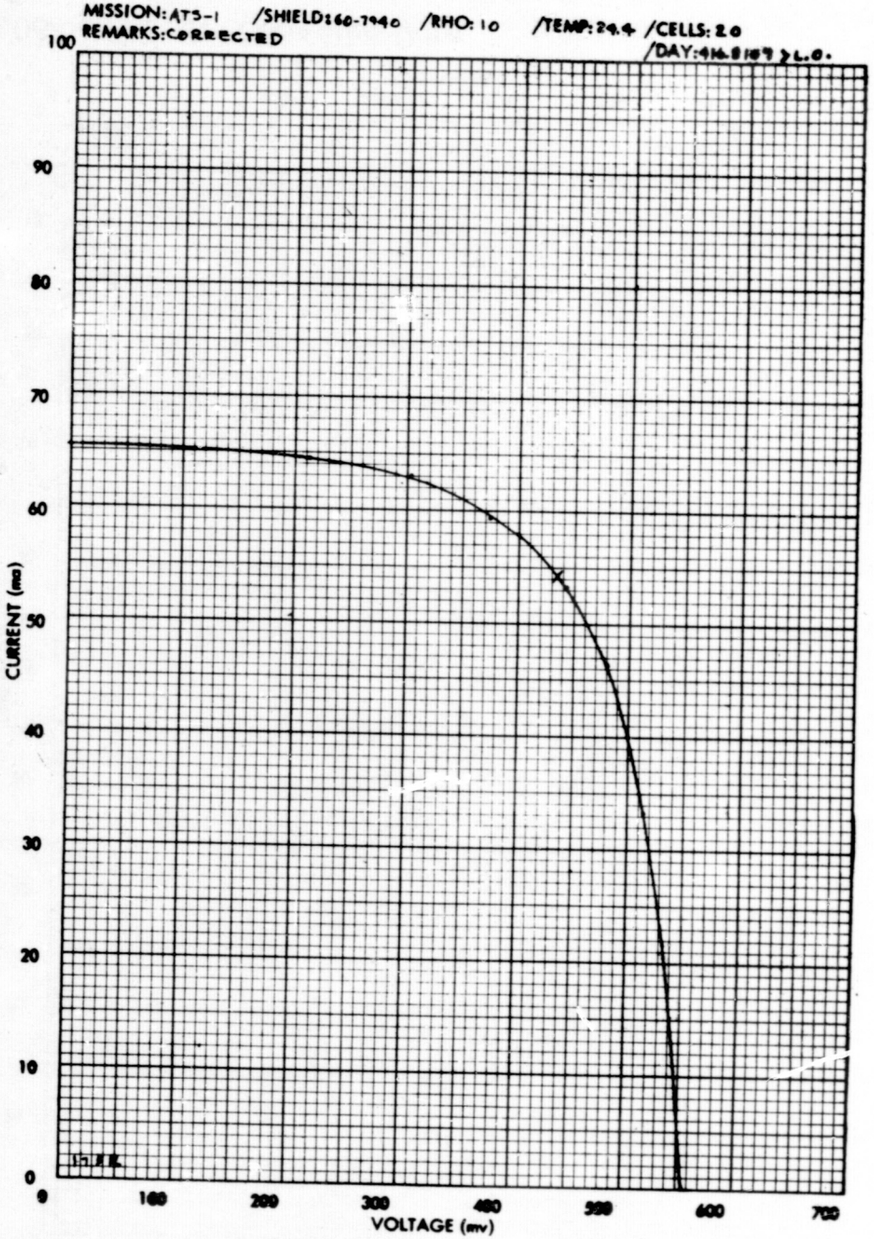
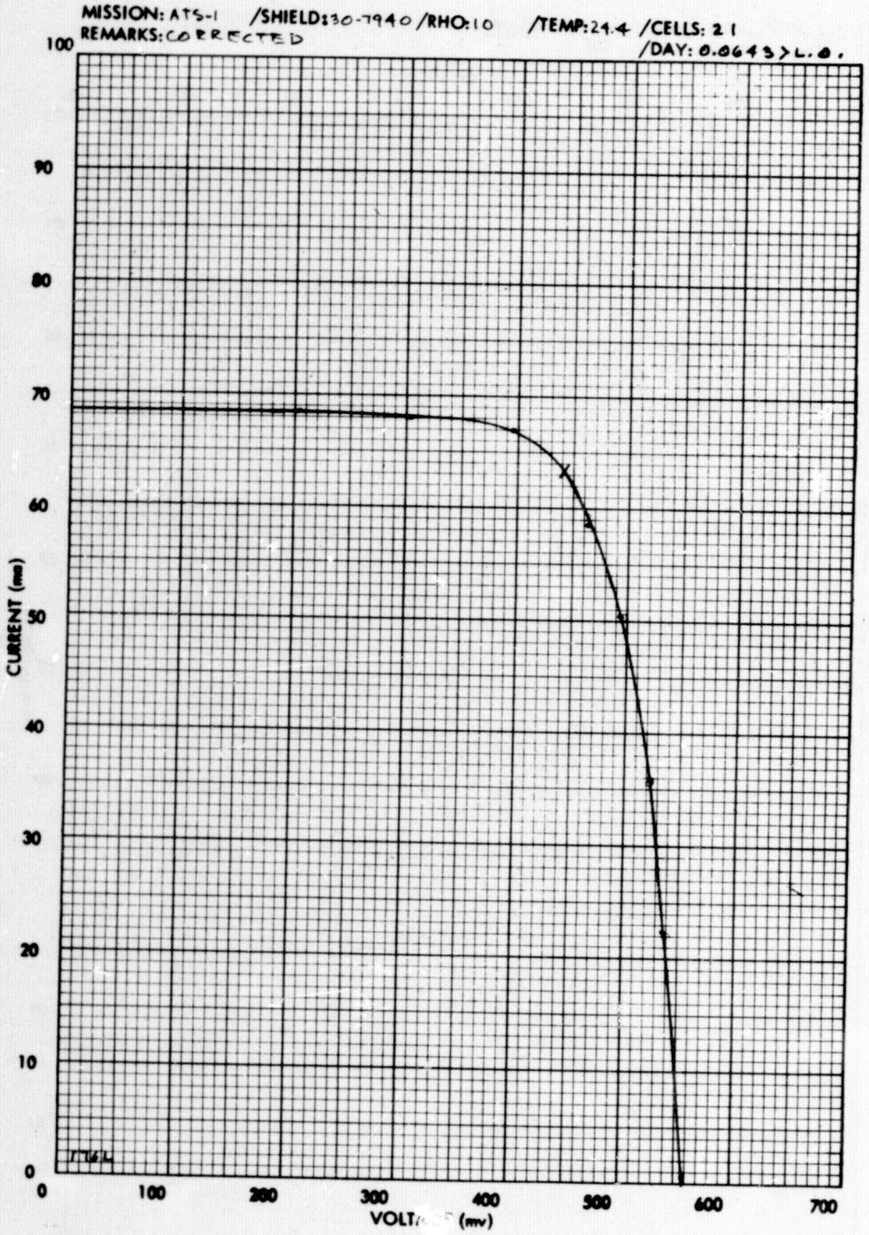


Figure 175. Cell 20, Days 270.4 and 416.8. Corrected Data



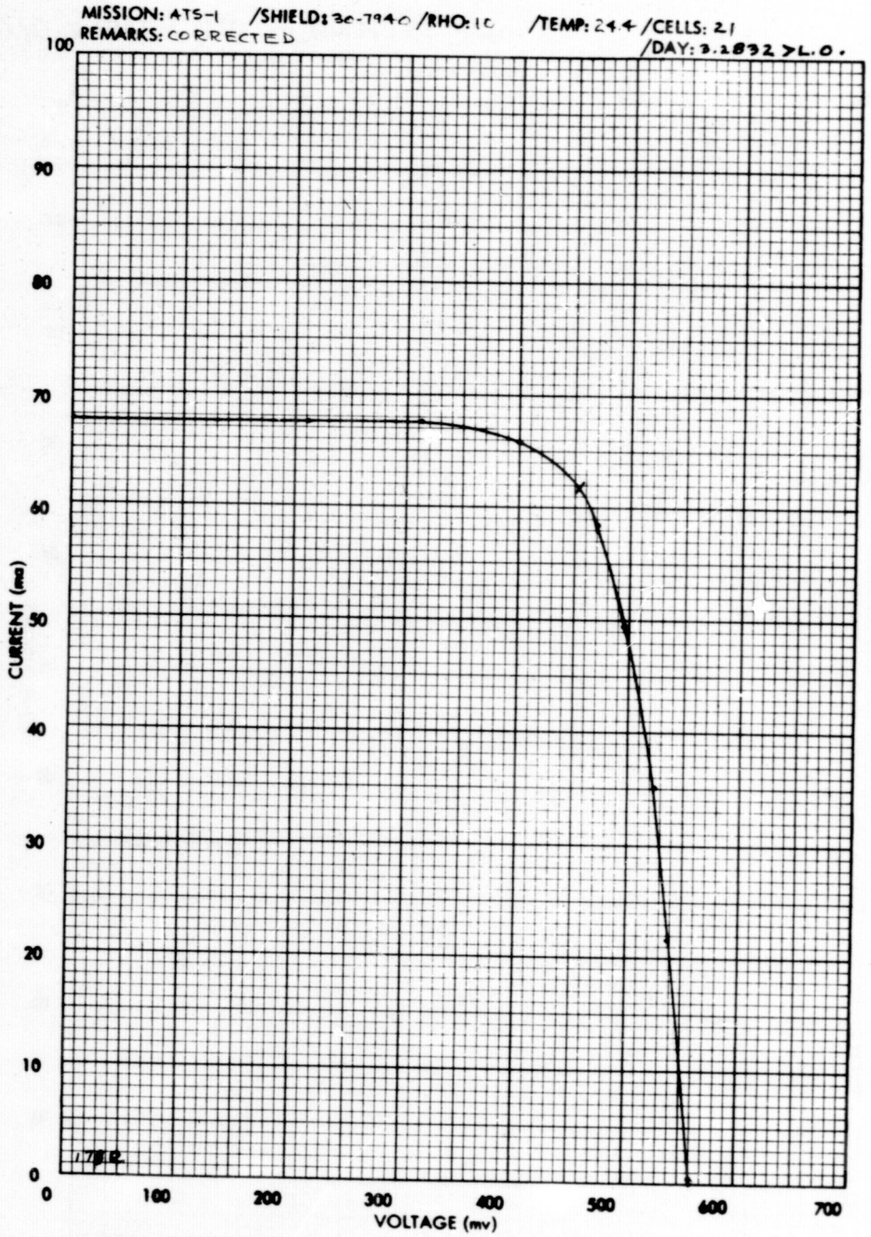
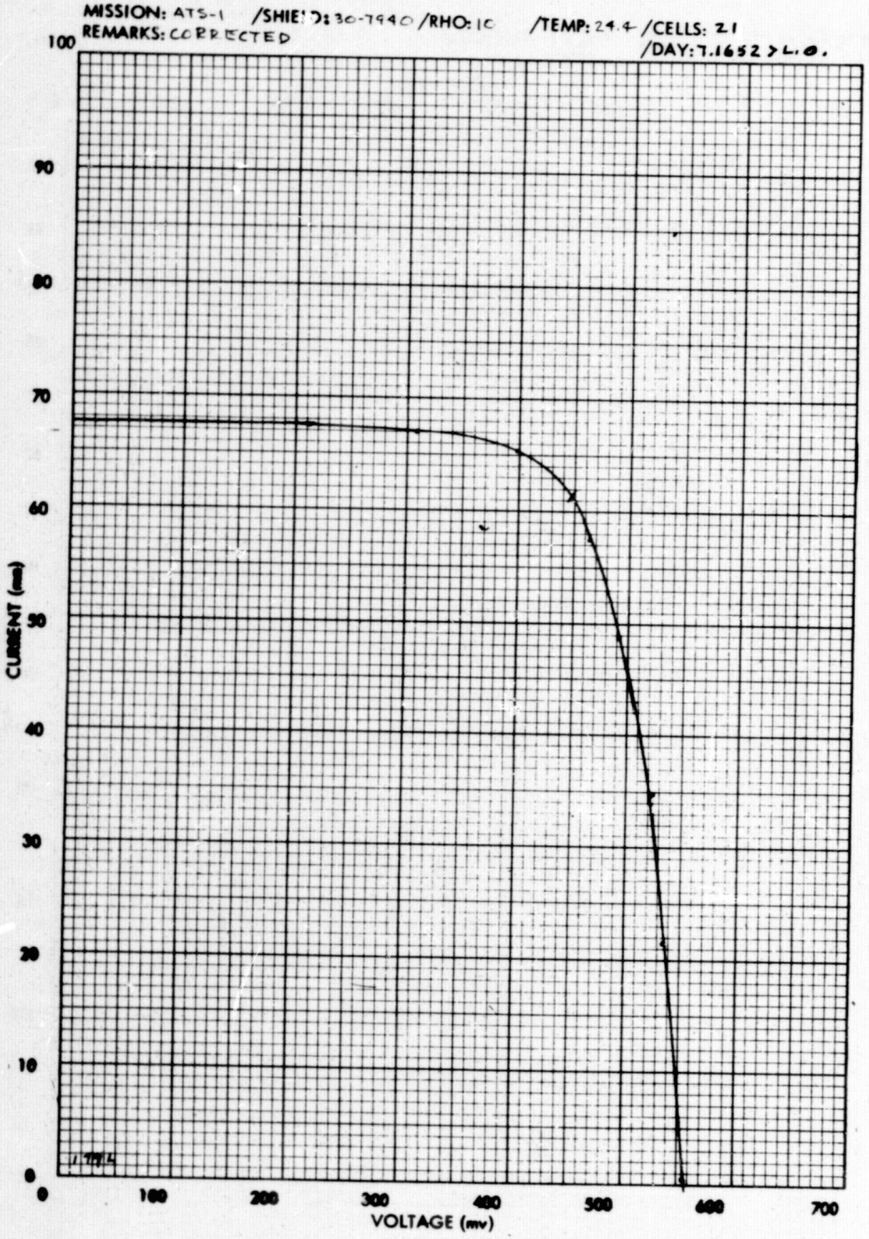


Figure 176. Cell 21, Days 0.064 and 3.2. Corrected Data



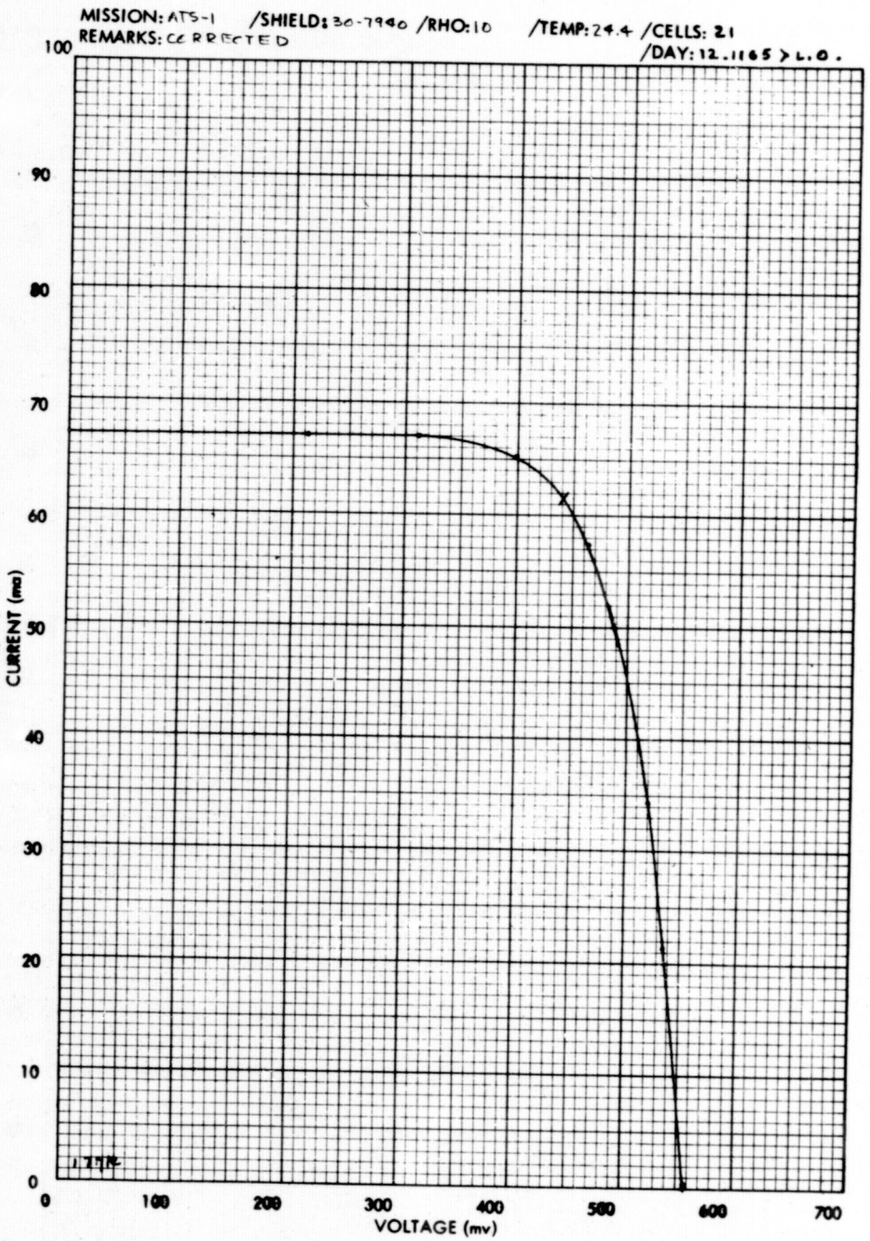
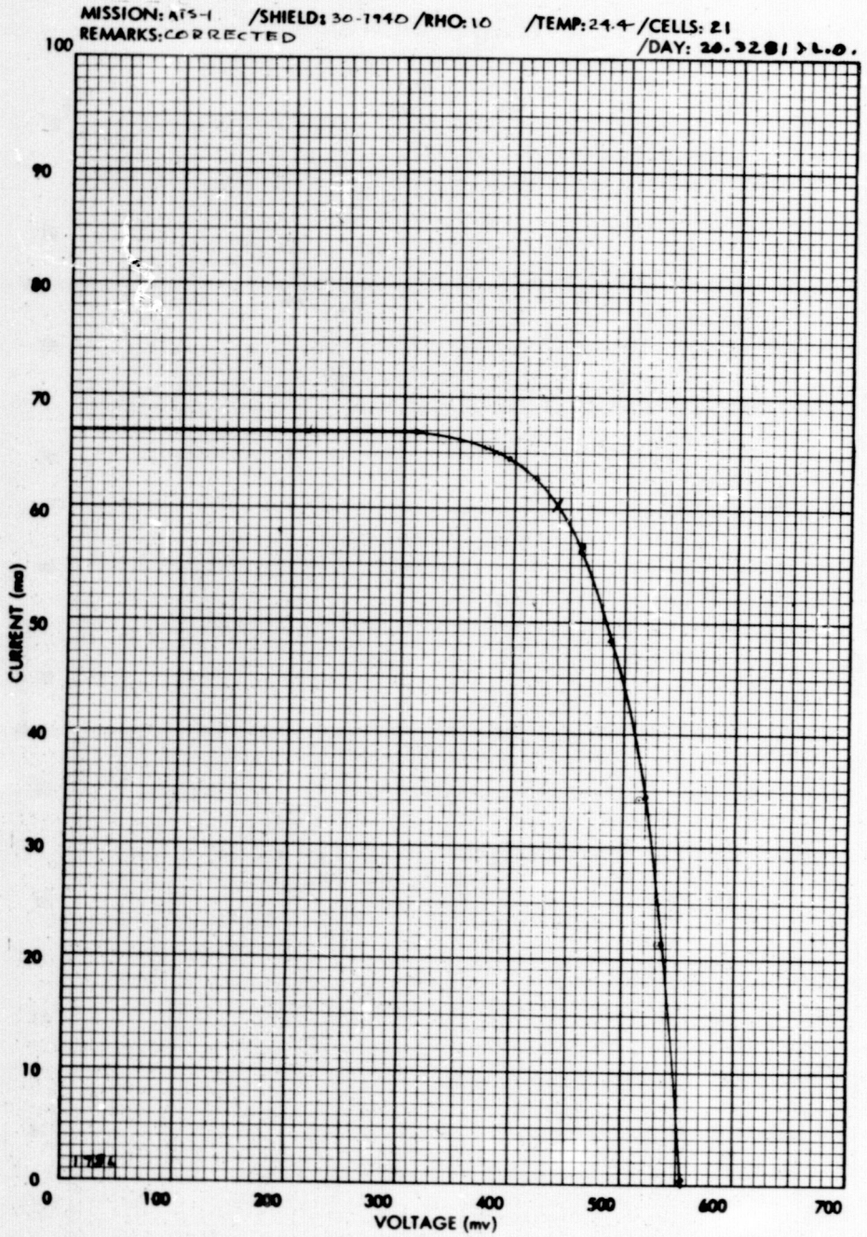


Figure 177. Cell 21, Days 7.1 and 12.1. Corrected Data



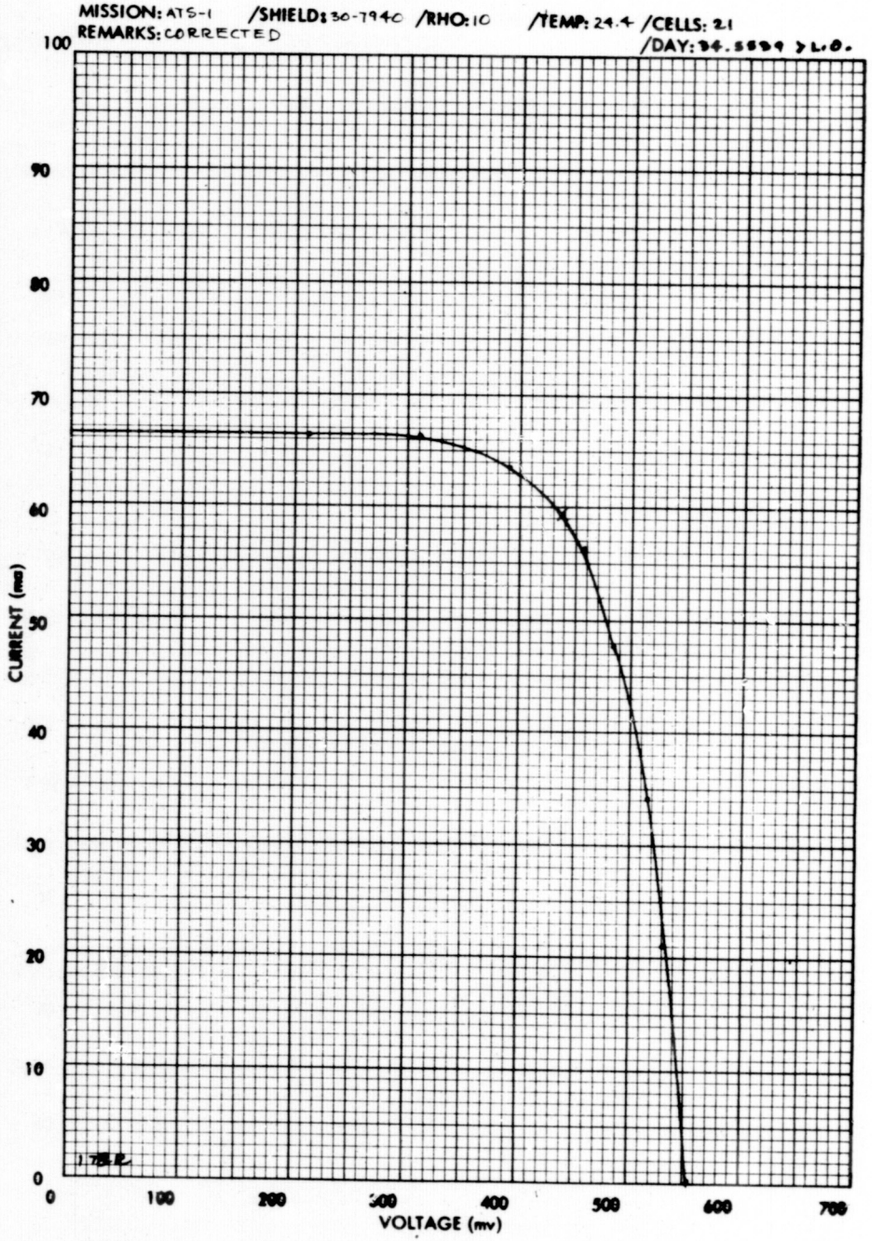
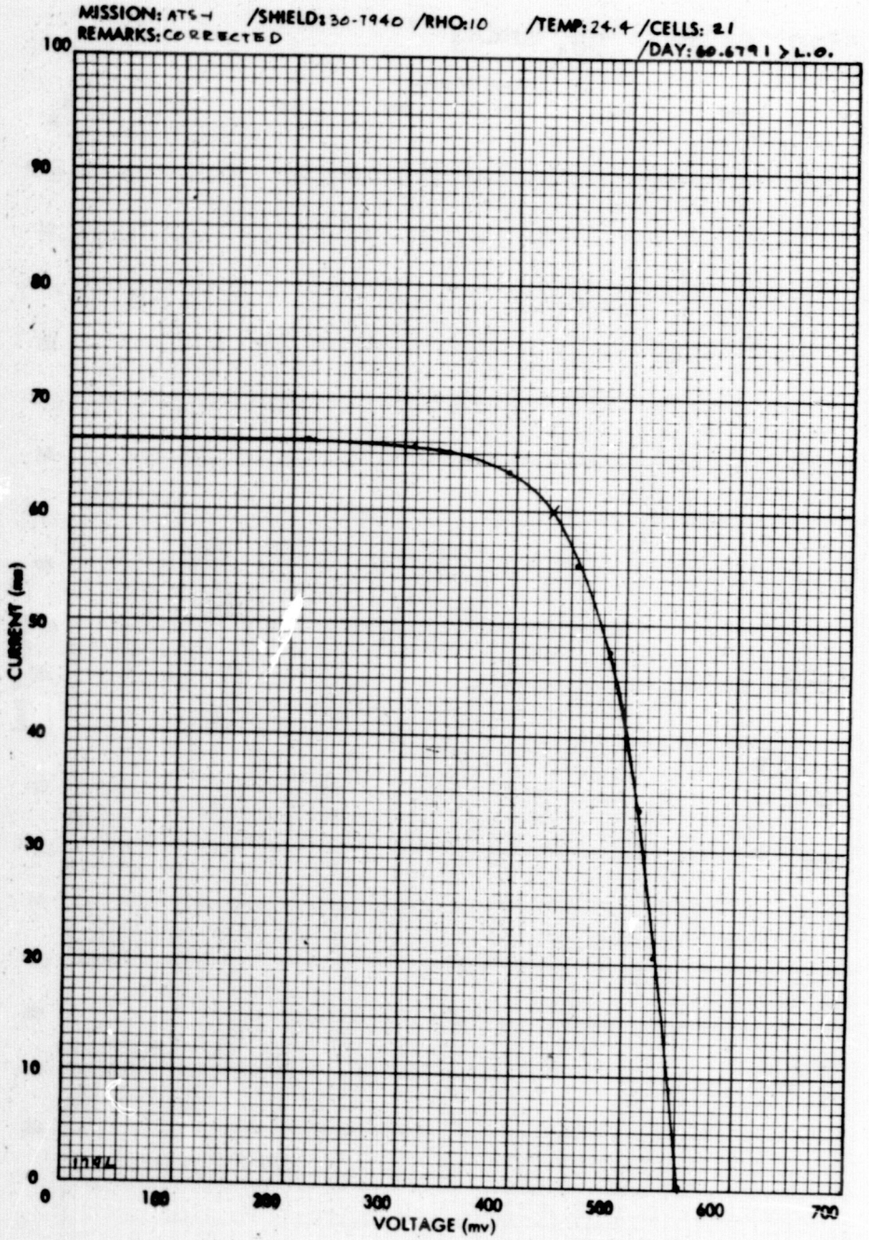


Figure 178. Cell 21, Days 20.3 and 34.5. Corrected Data



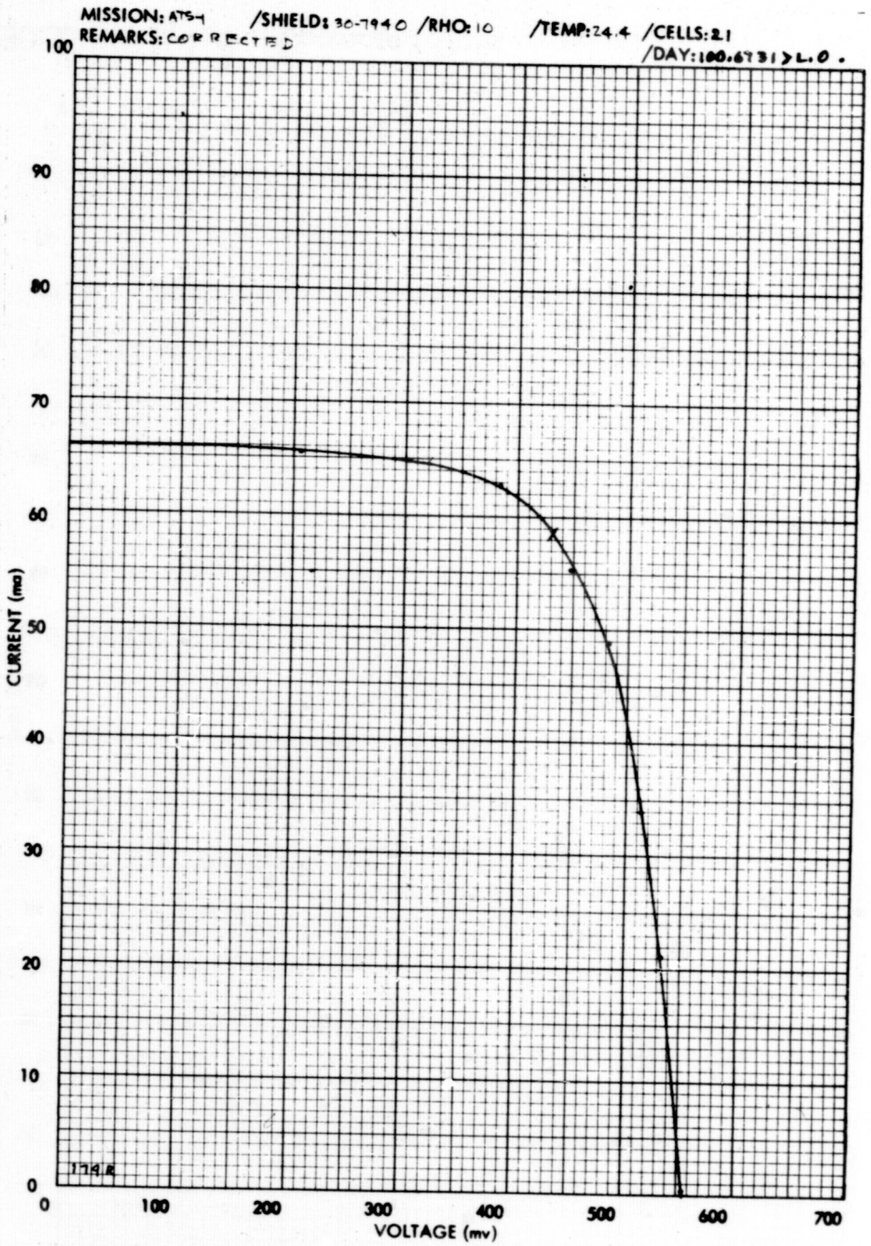
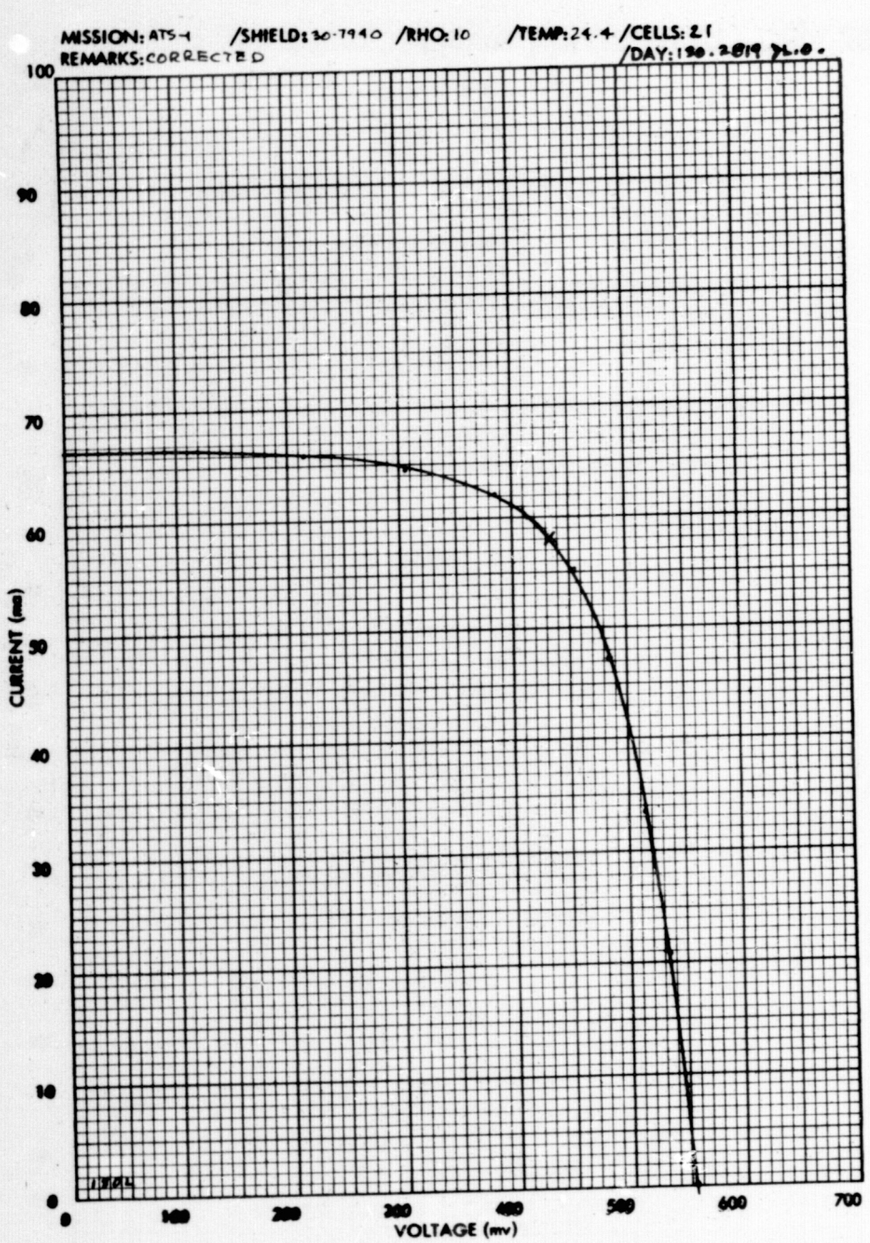


Figure 179. Cell 21, Days 60.6 and 100.6. Corrected Data



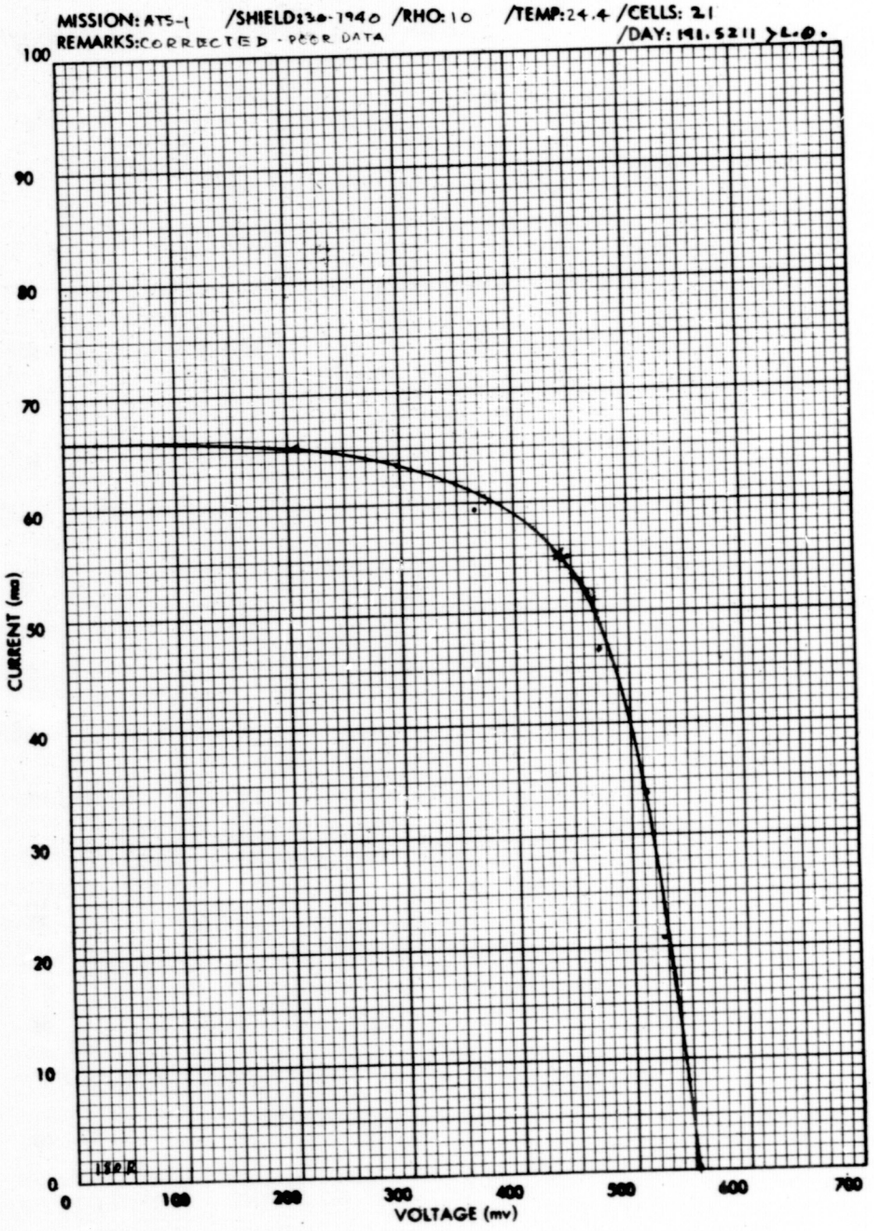
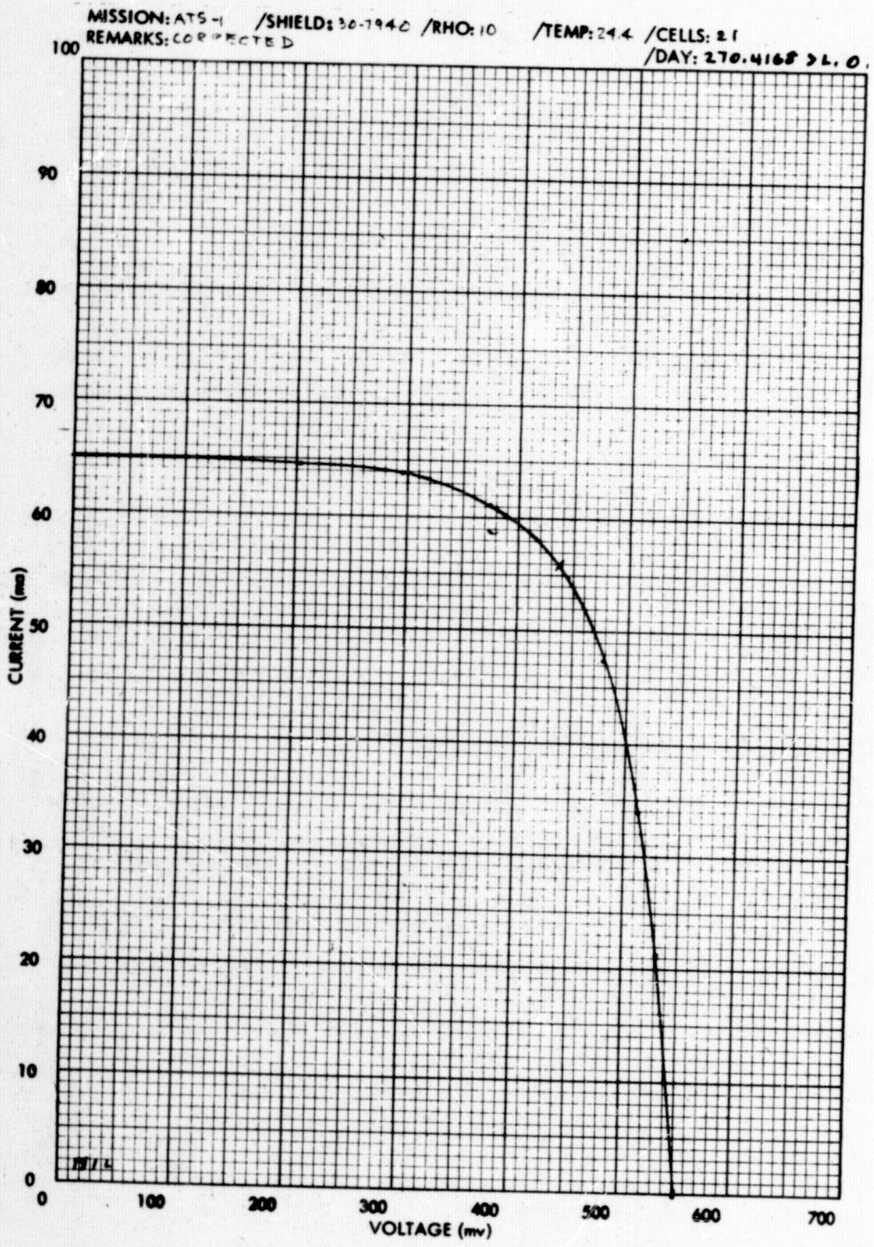


Figure 180. Cell 21, Days 130.2 and 191.5. Corrected Data



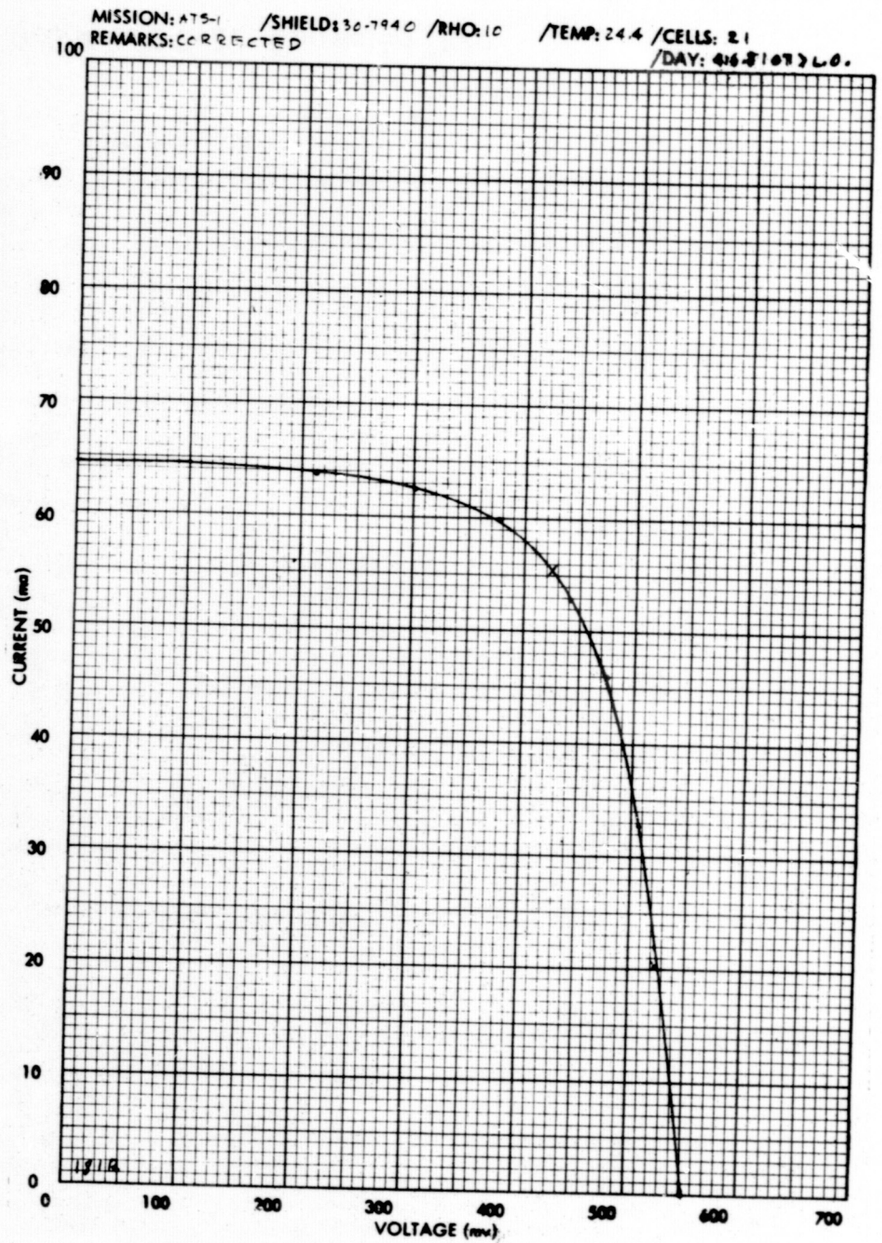
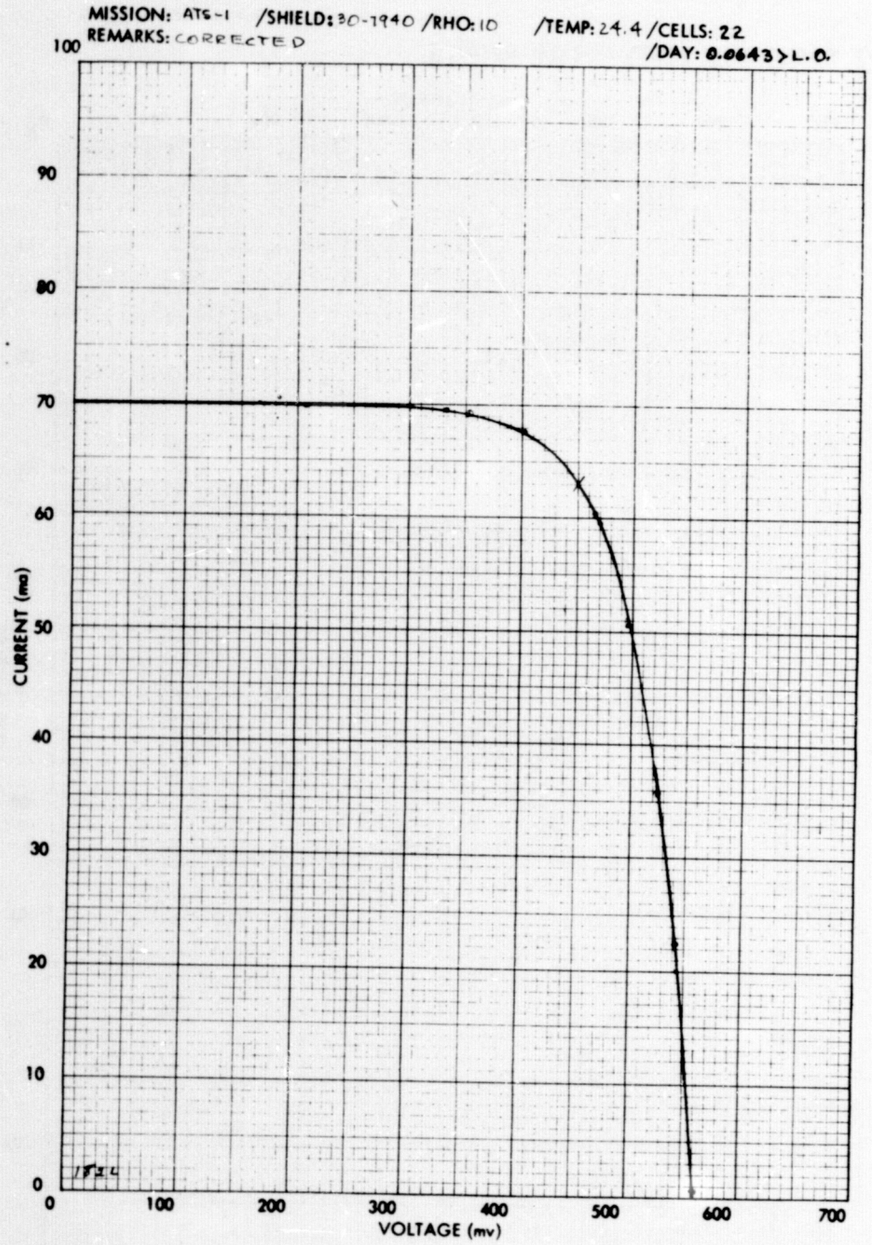


Figure 181. Cell 21, Days 270.4 and 416.8. Corrected Data



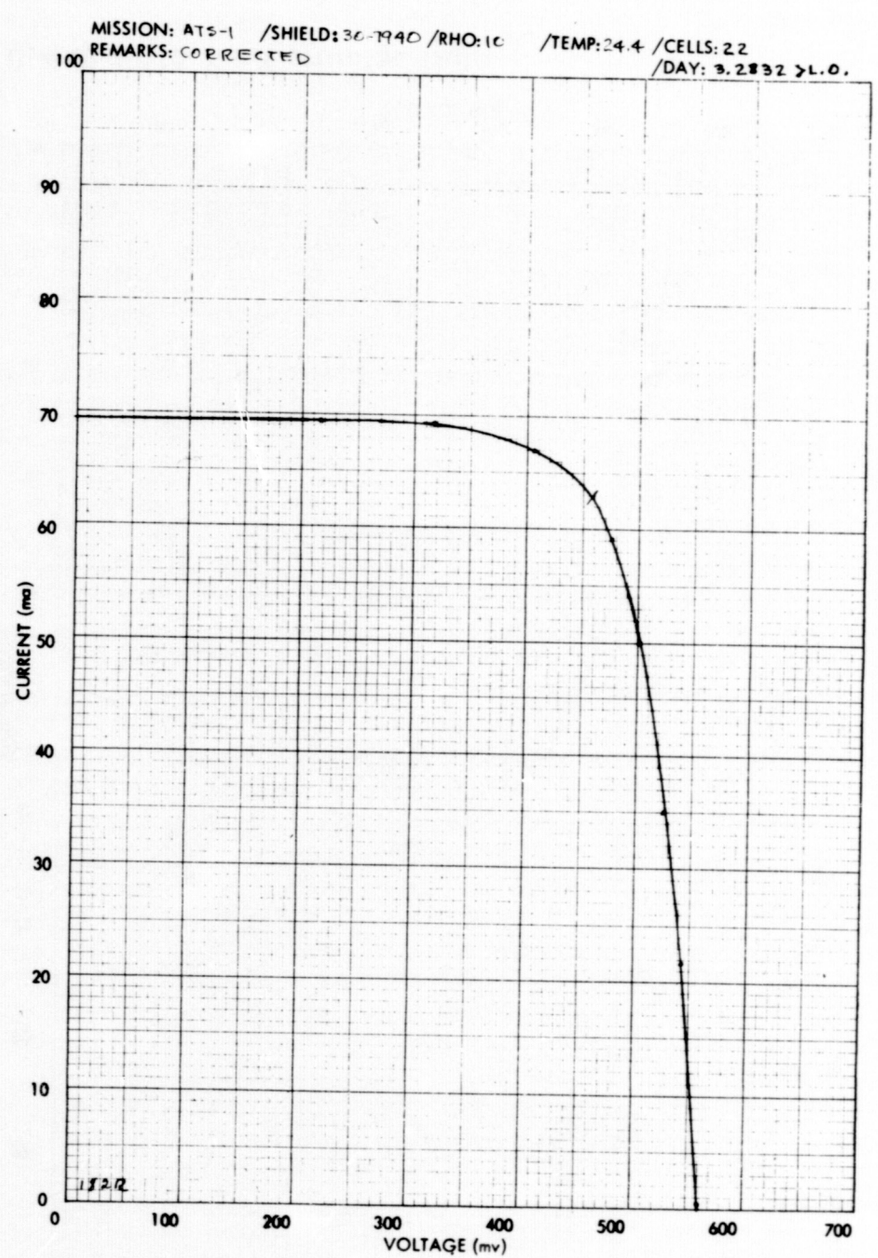
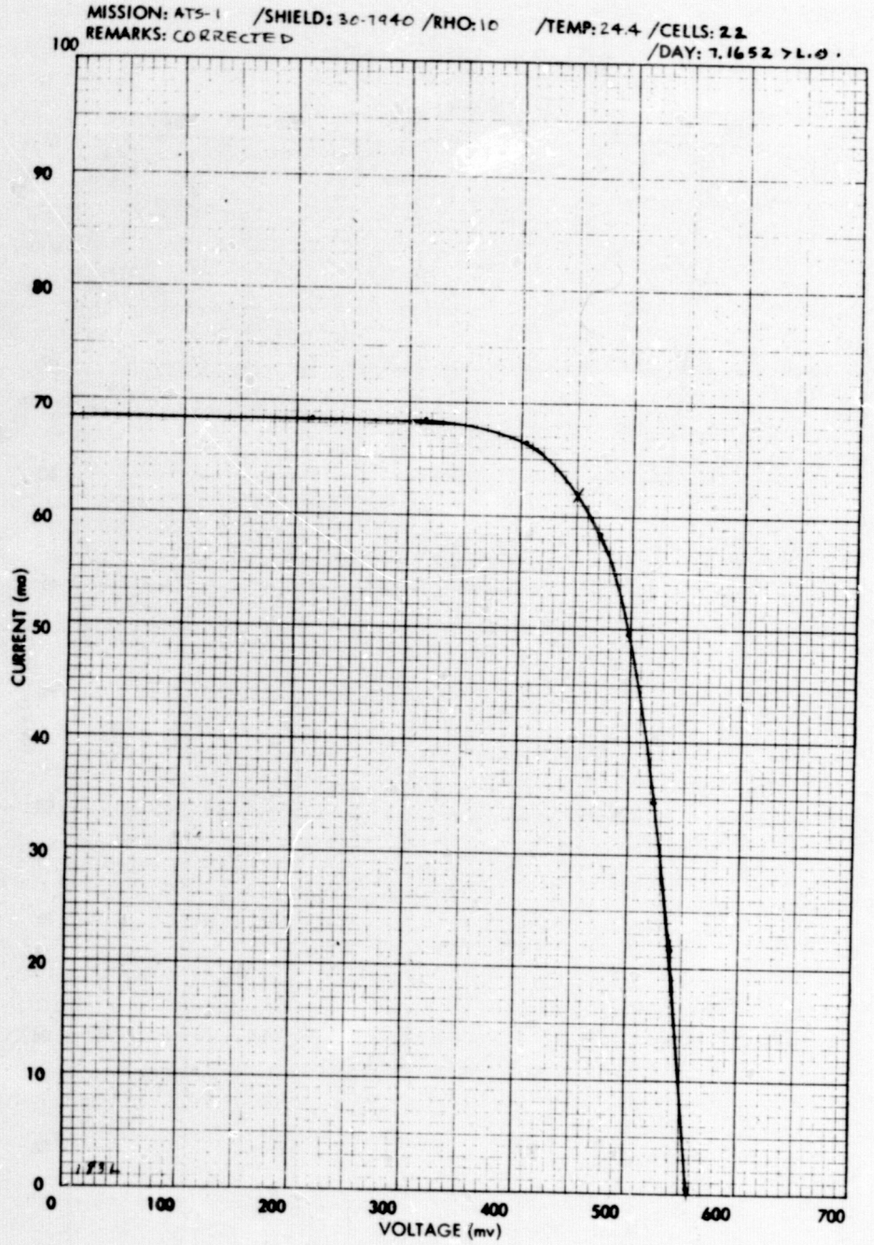


Figure 182. Cell 22, Days 0.064 and 3.2. Corrected Data



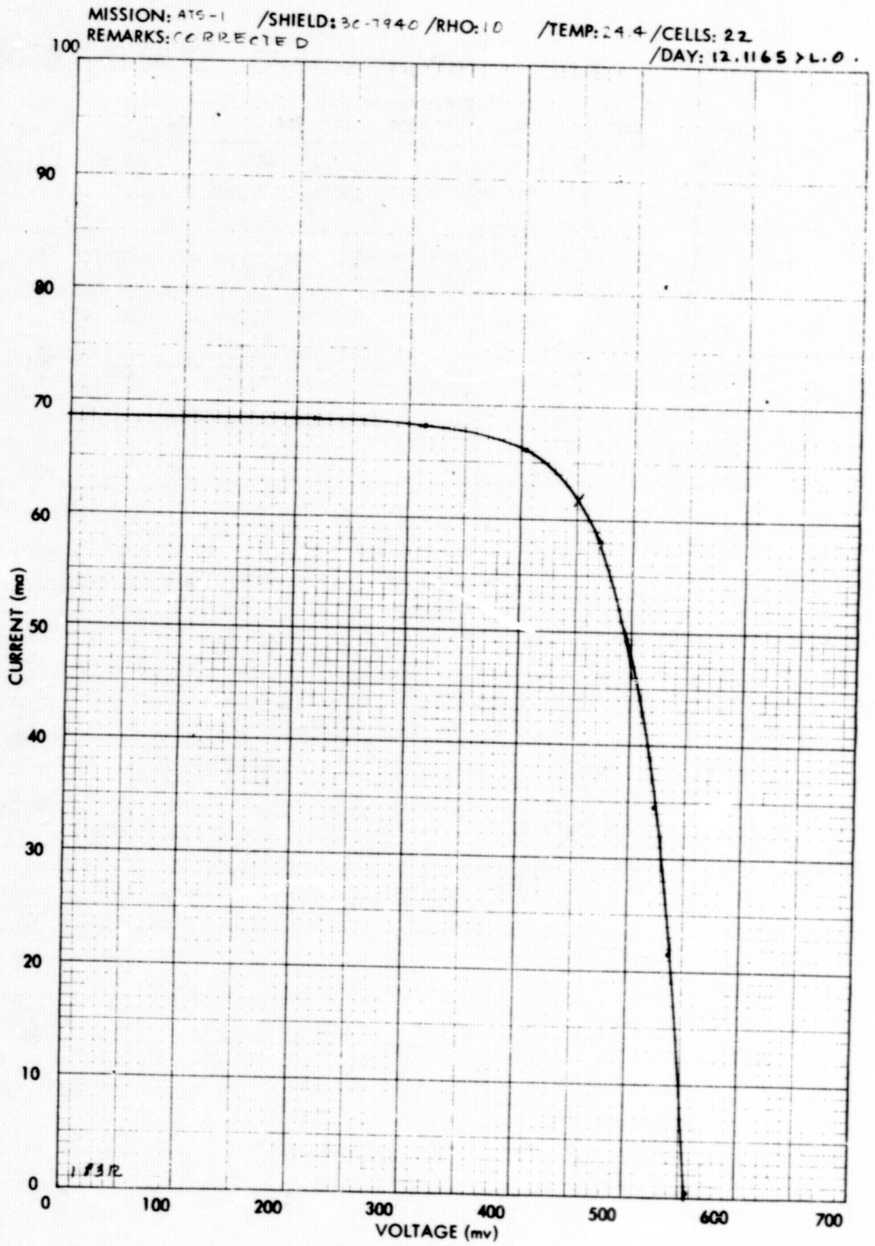
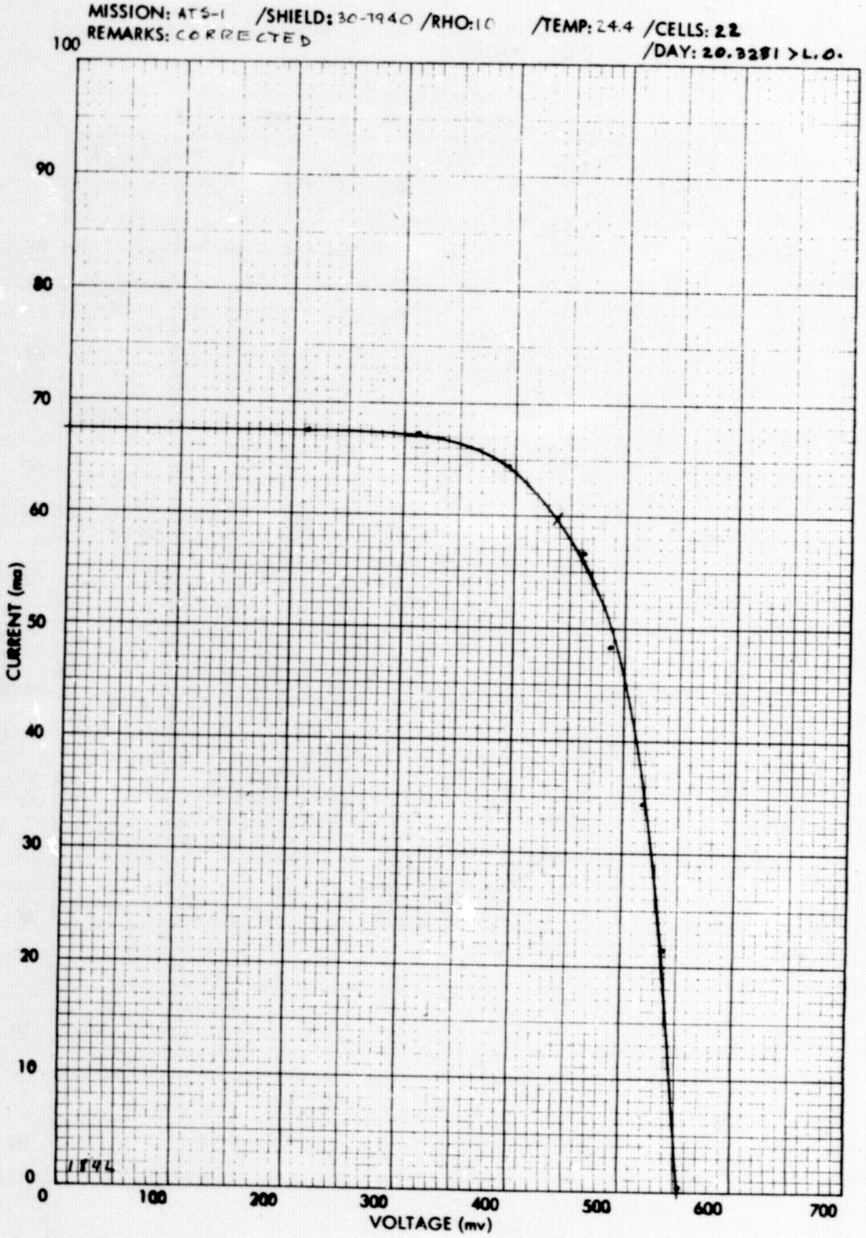


Figure 183. Cell 22, Days 7.1 and 12.1. Corrected Data



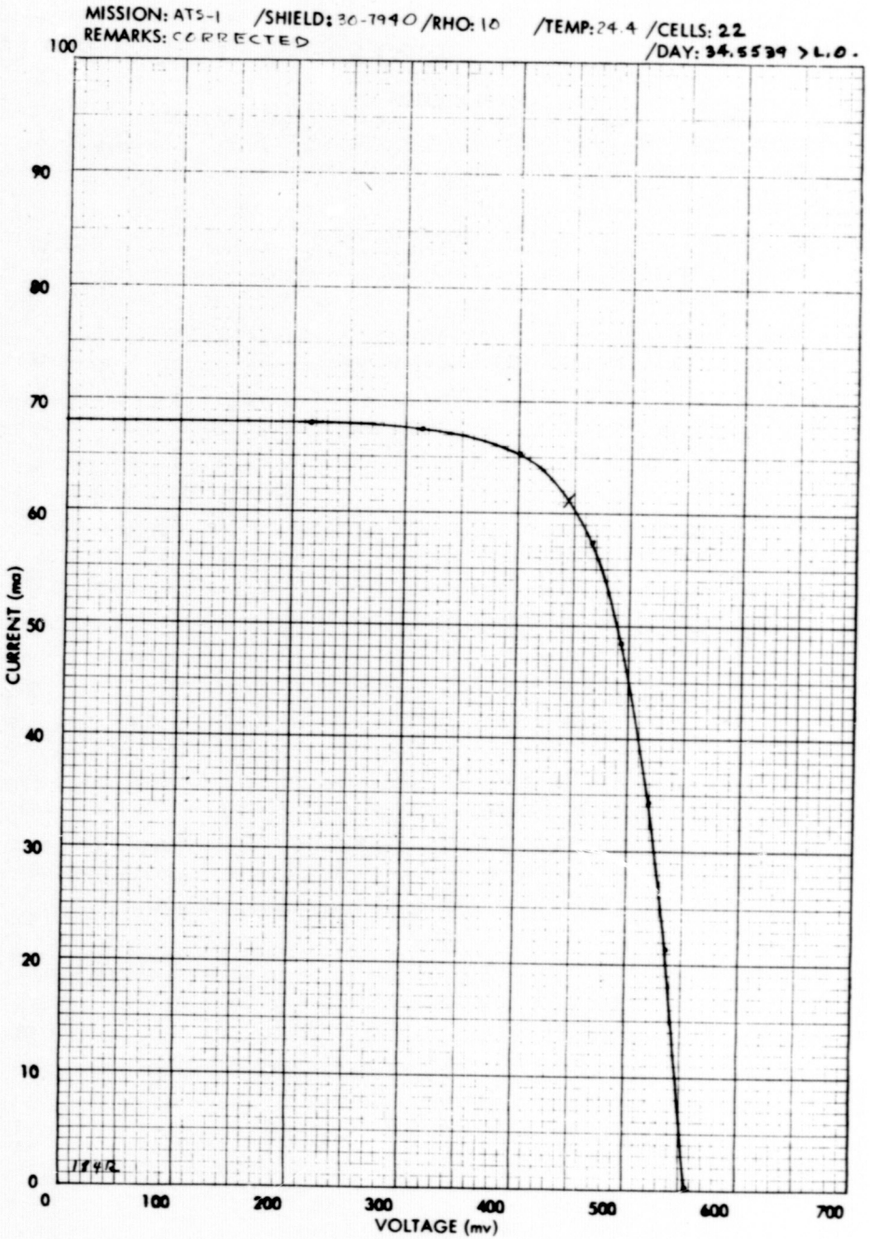
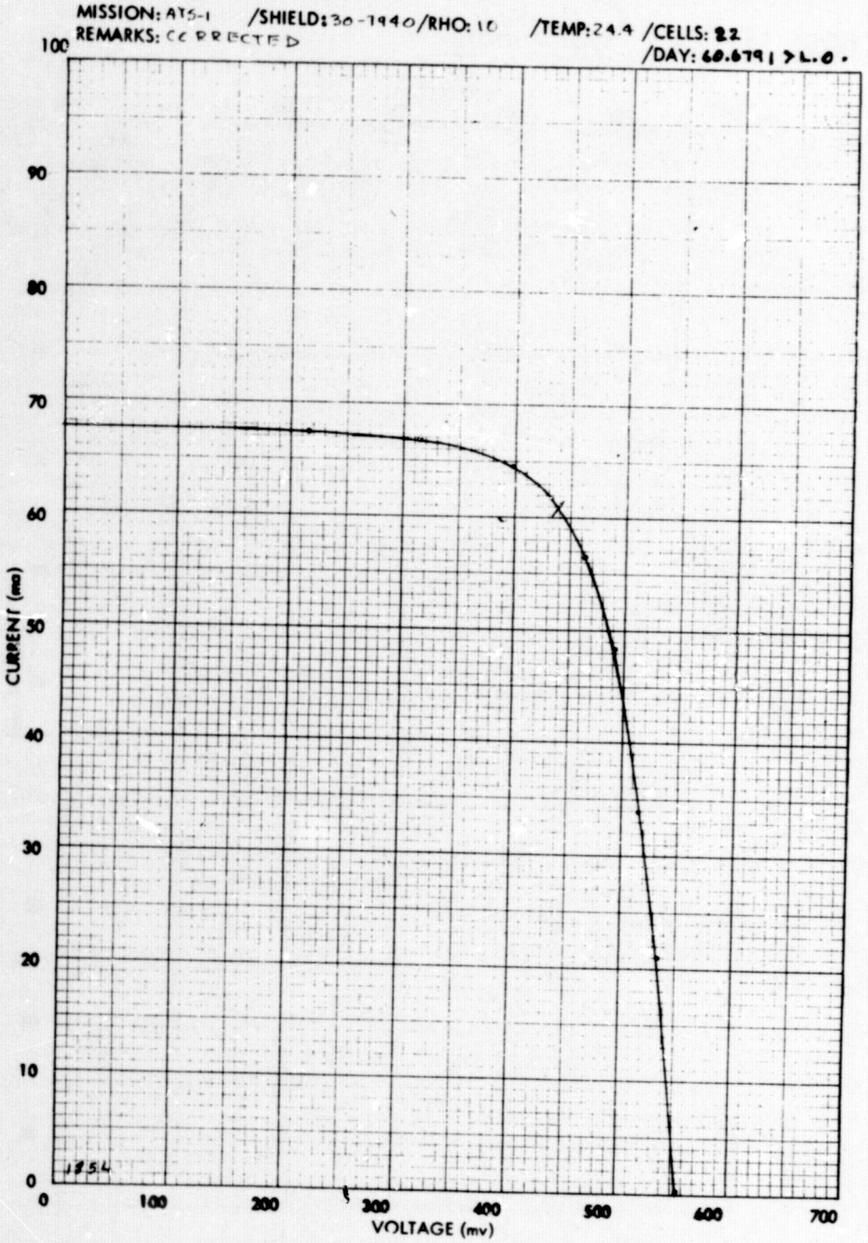


Figure 184. Cell 22, Days 20.3 and 34.5. Corrected Data



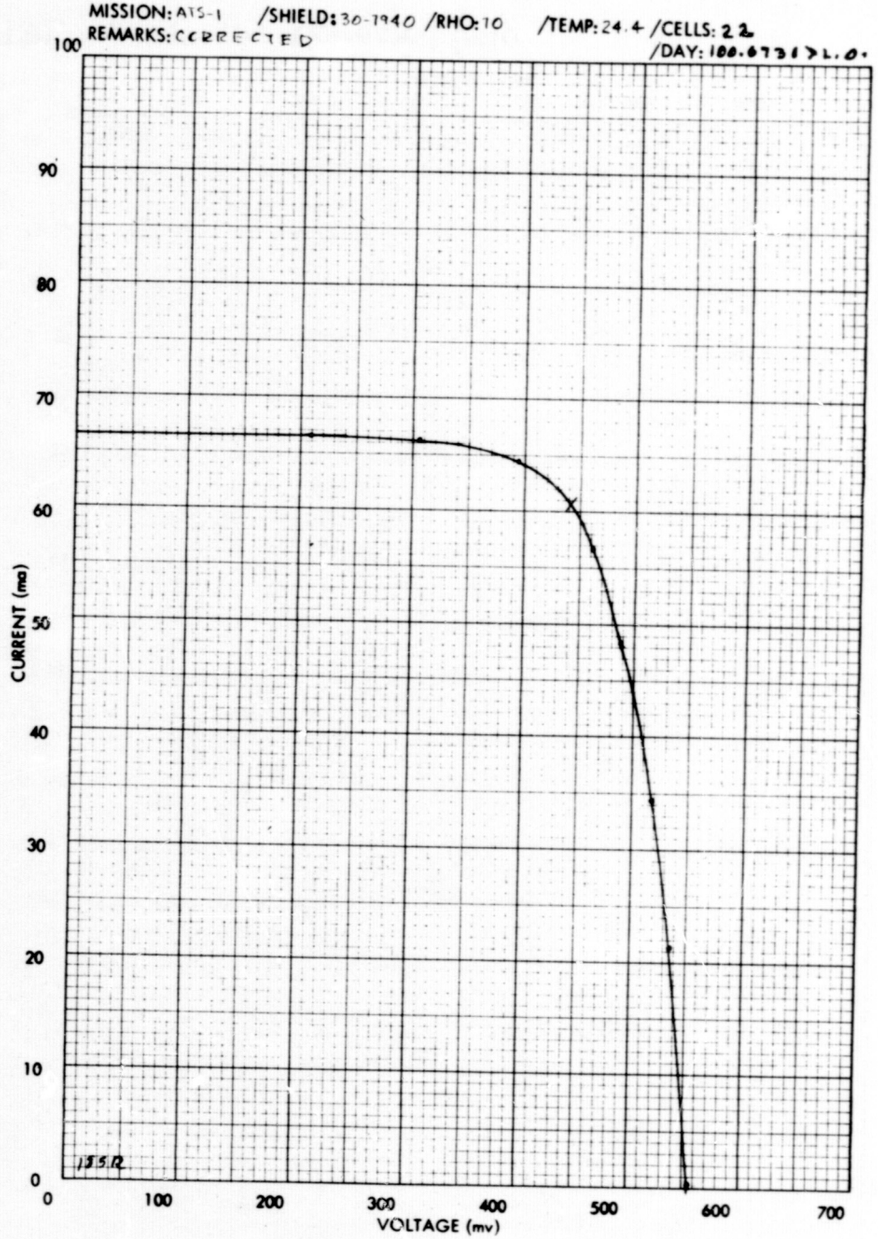
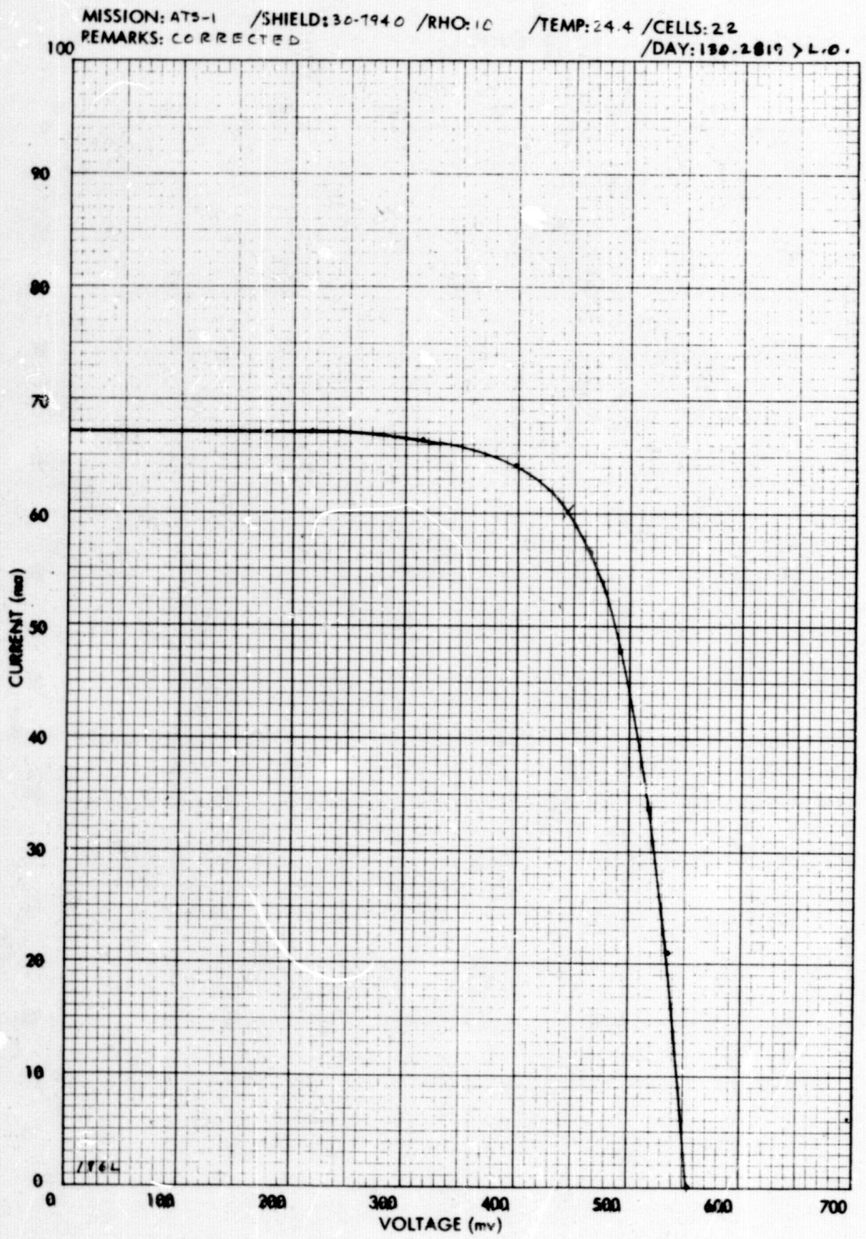


Figure 185. Cell 22, Days 60.6 and 100.6. Corrected Data



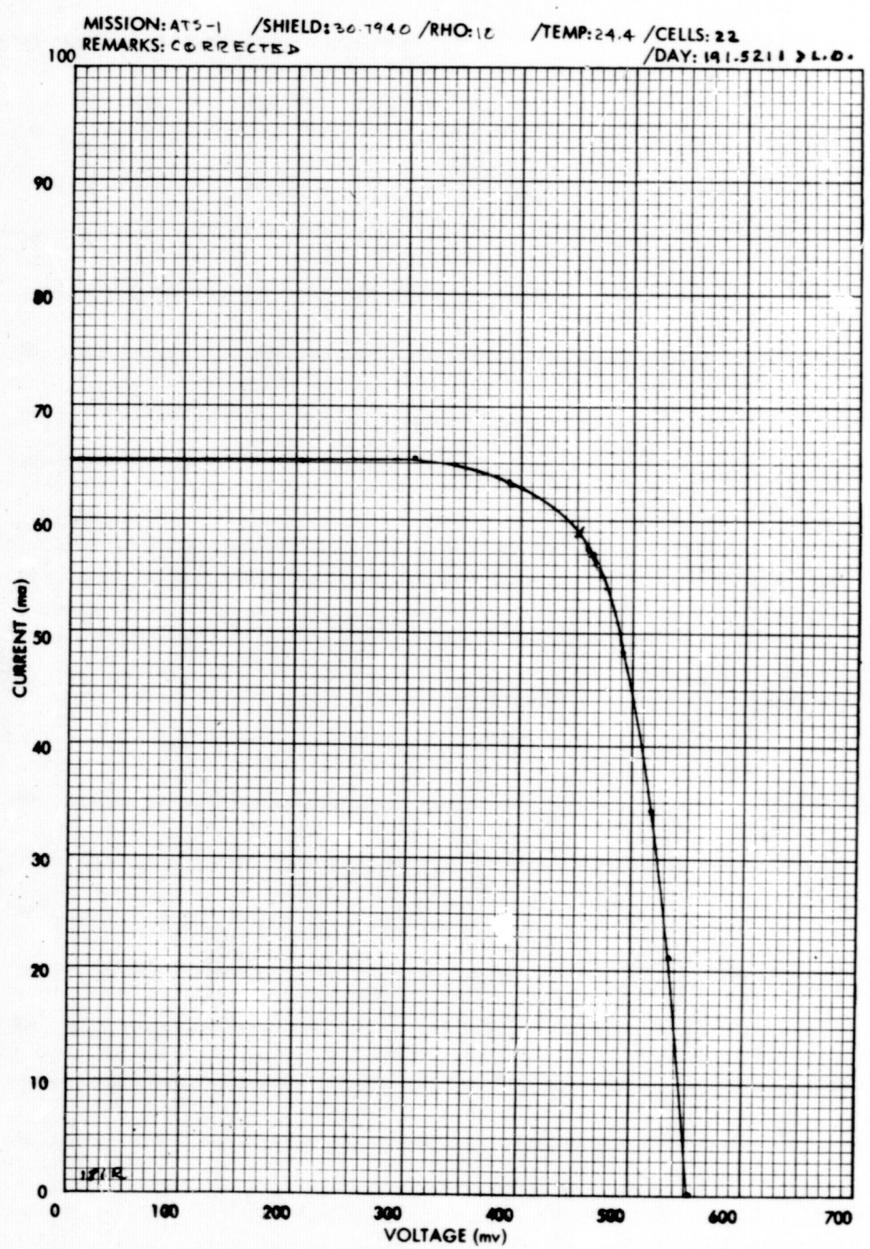
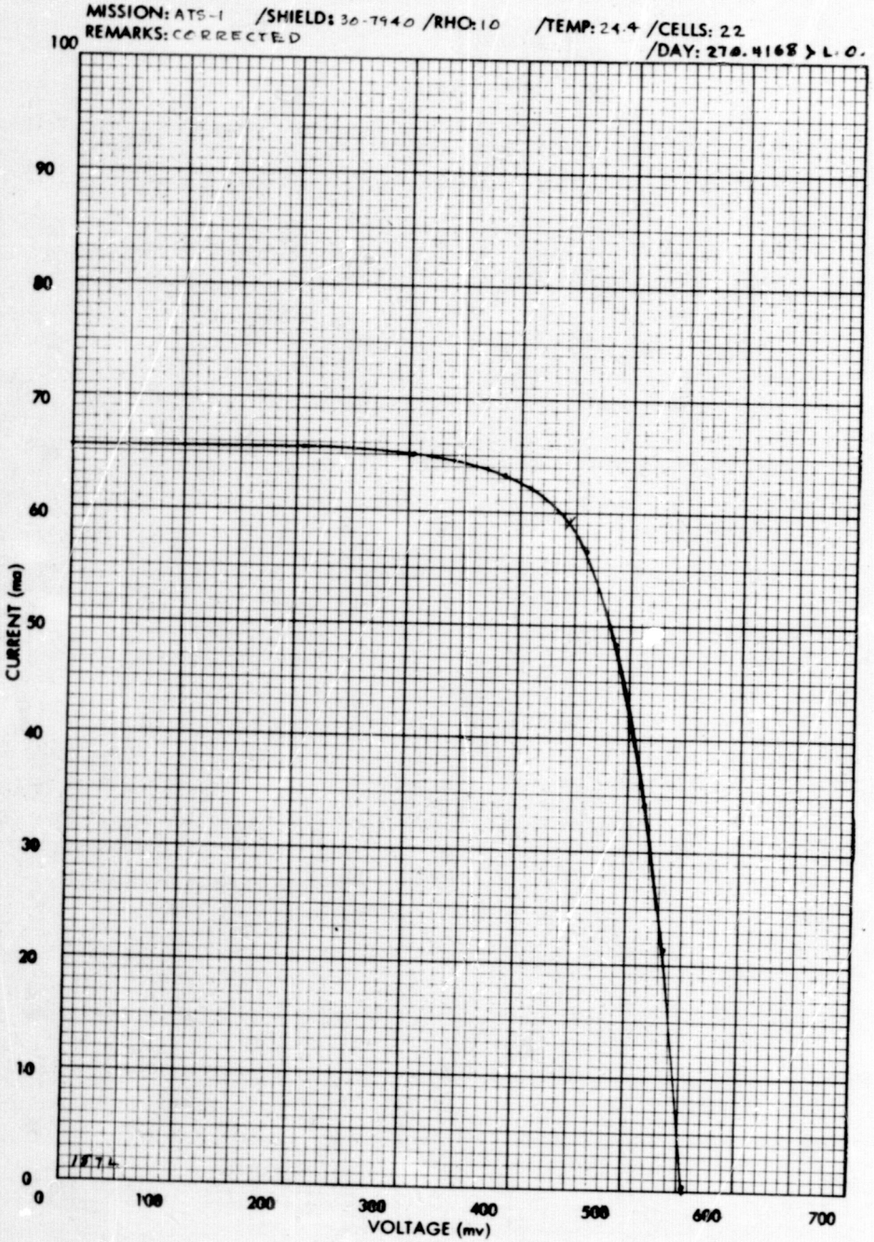


Figure 186. Cell 22, Days 130.2 and 191.5. Corrected Data



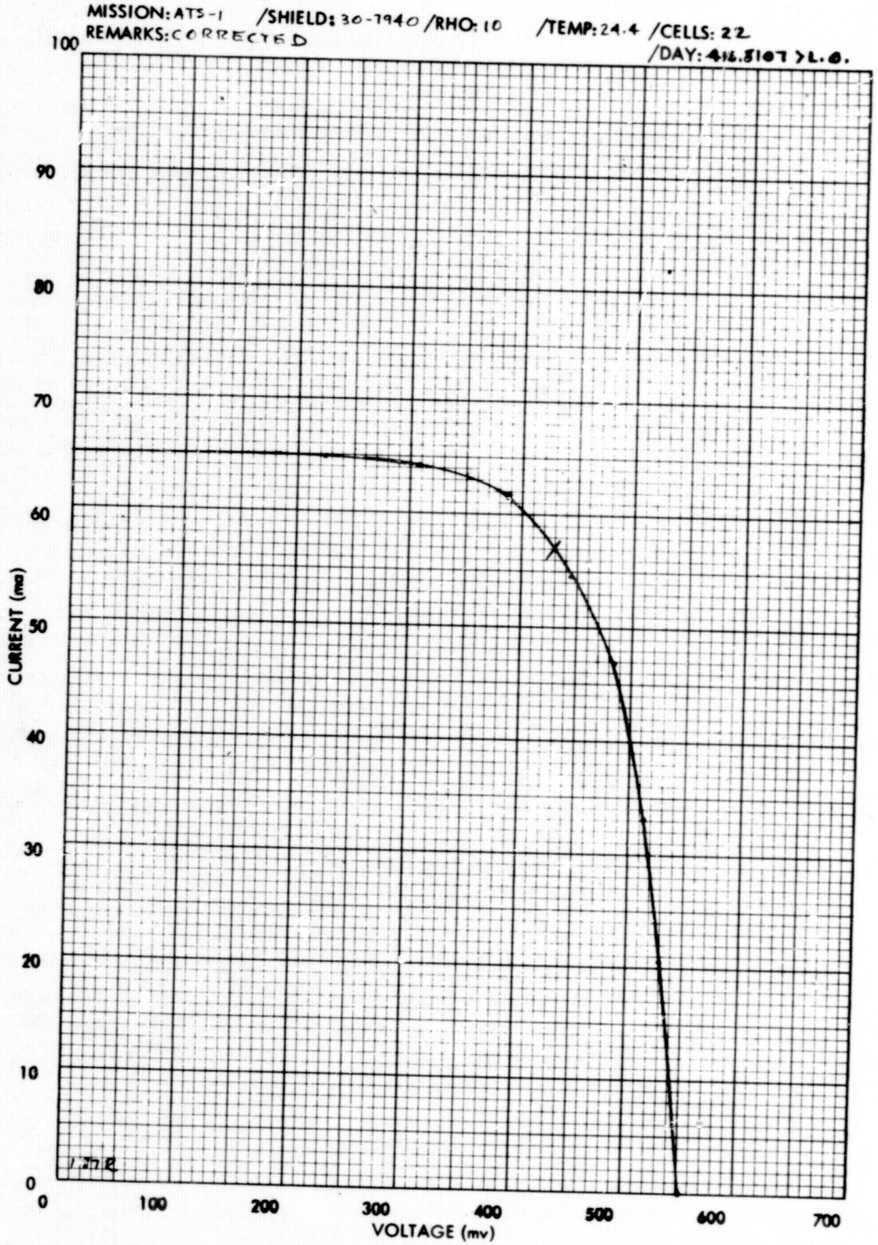


Figure 187. Cell 22, Days 270.4 and 416.8. Corrected Data

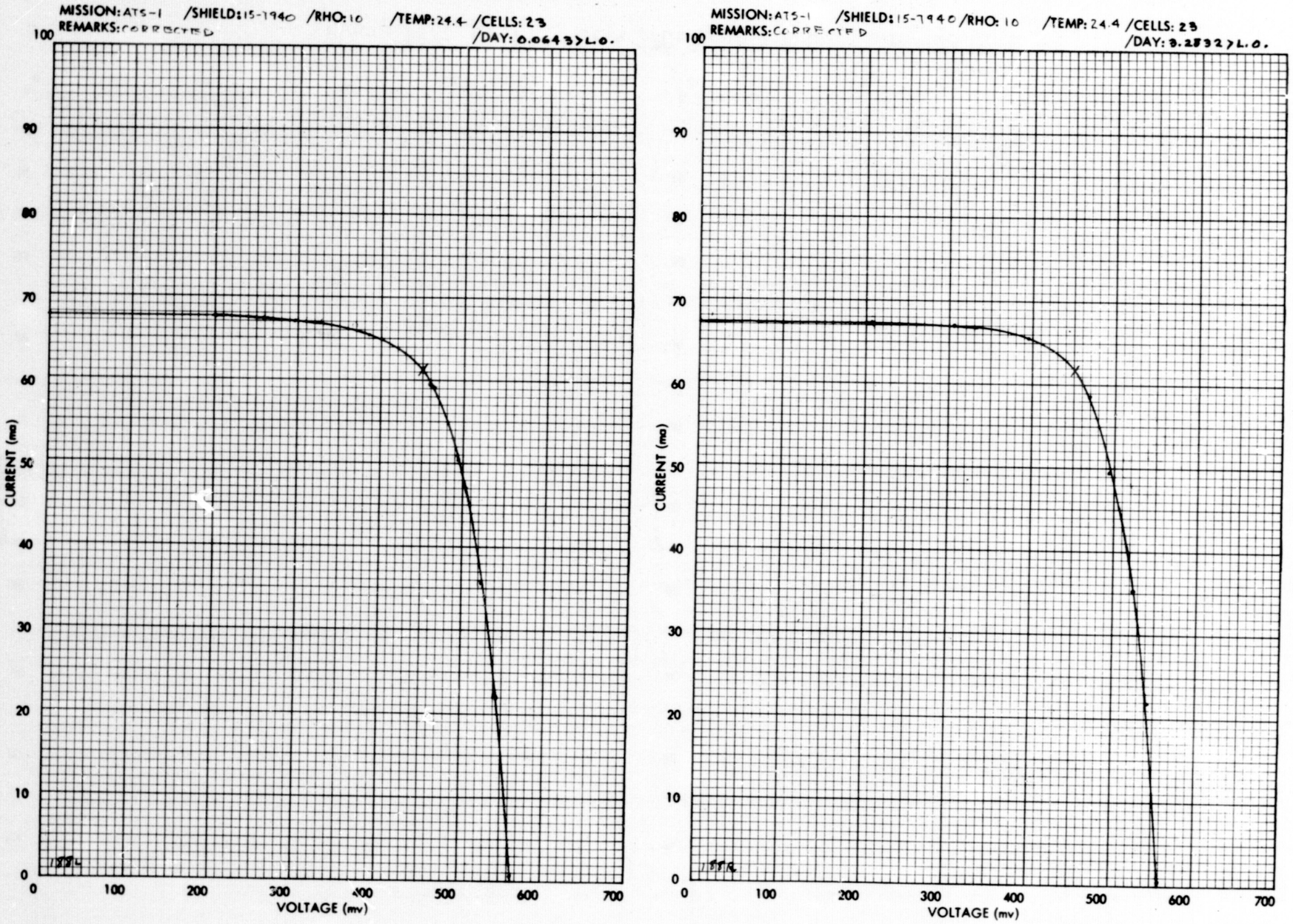
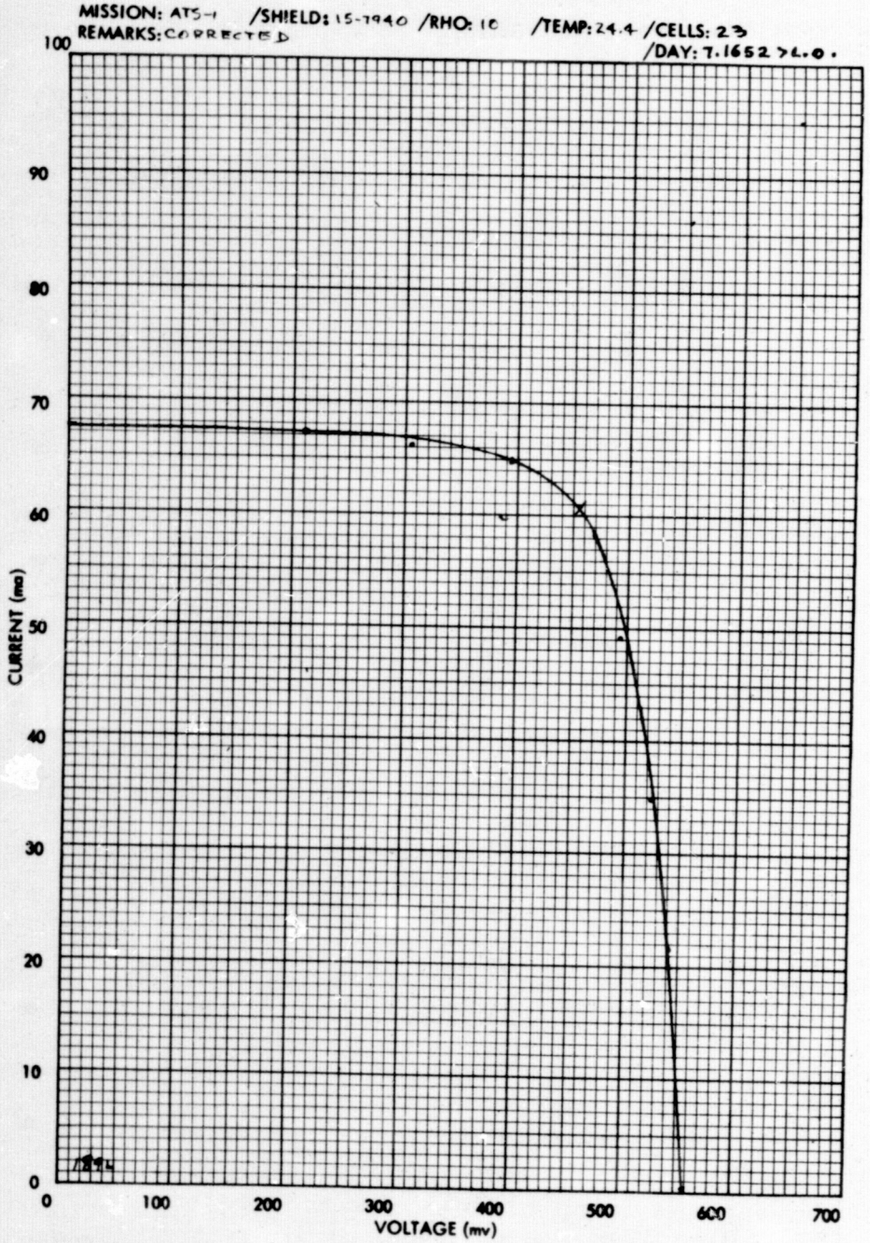


Figure 188. Cell 23, Days 0.064 and 3.2. Corrected Data



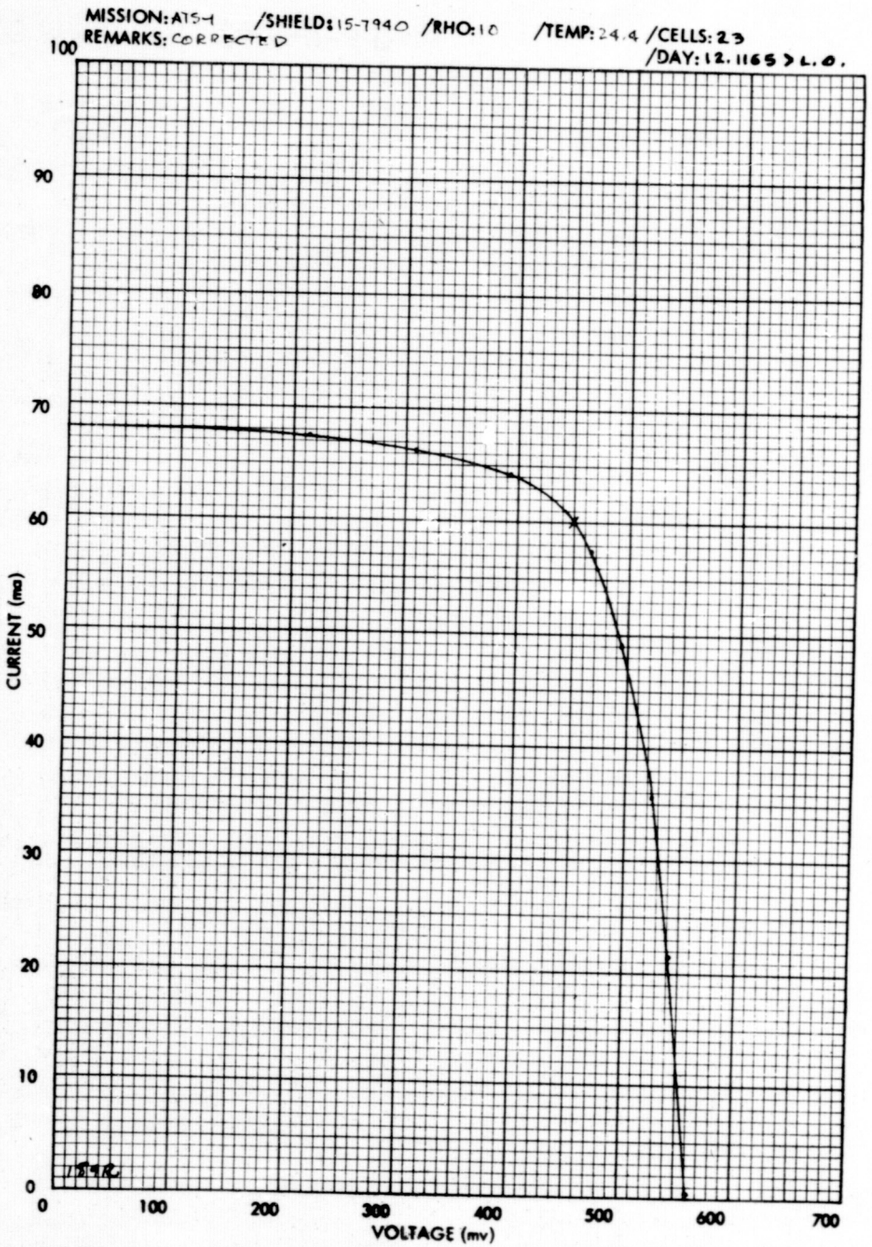
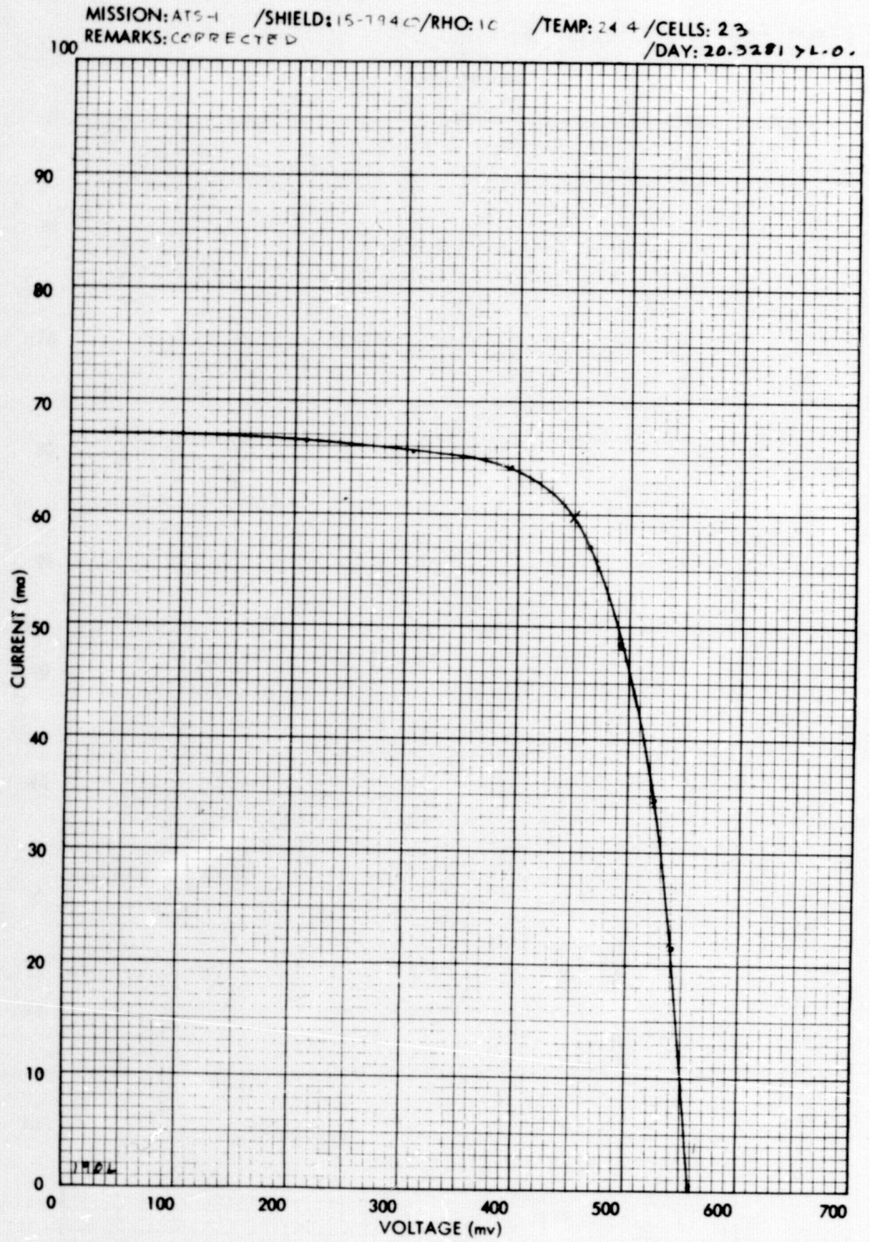


Figure 189. Cell 23, Days 7.1 and 12.1. Corrected Data



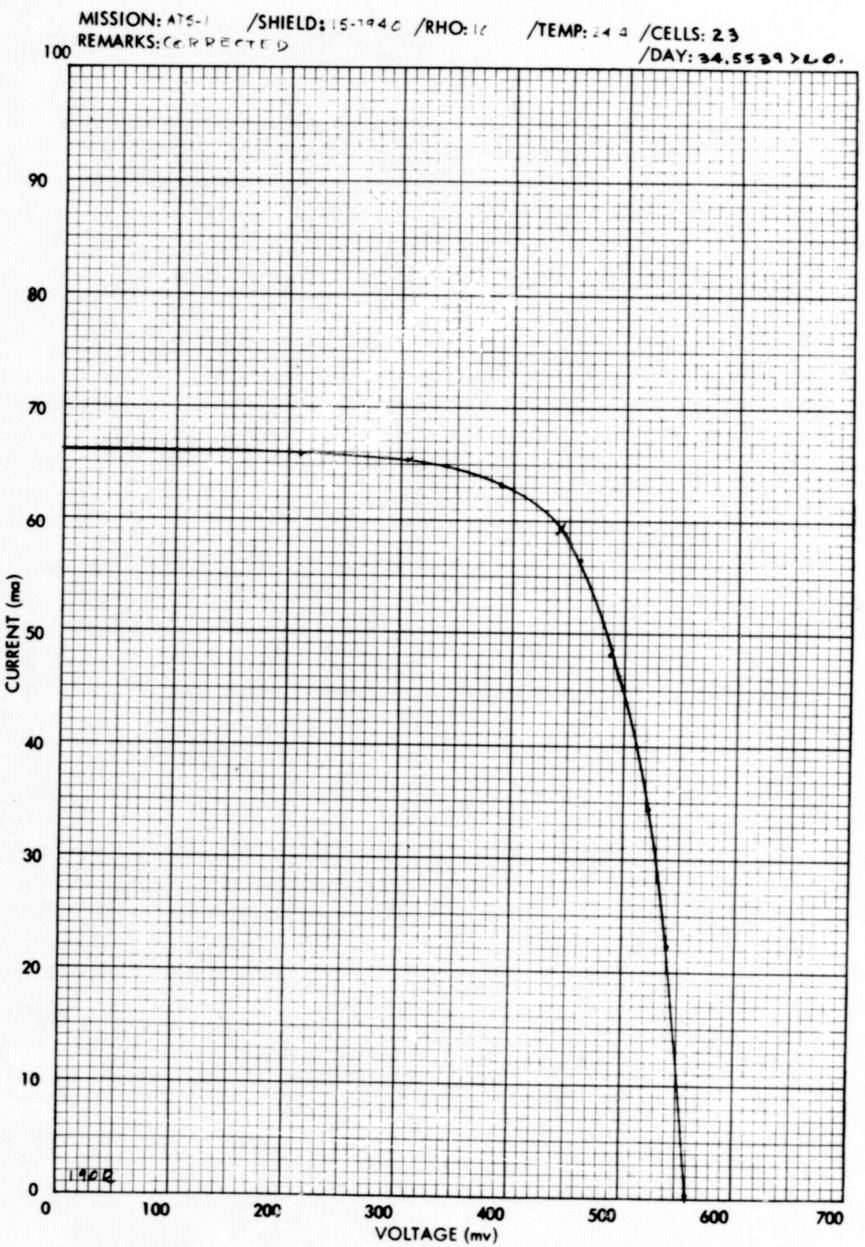


Figure 190. Cell 23, Days 20.3 and 34.5. Corrected Data

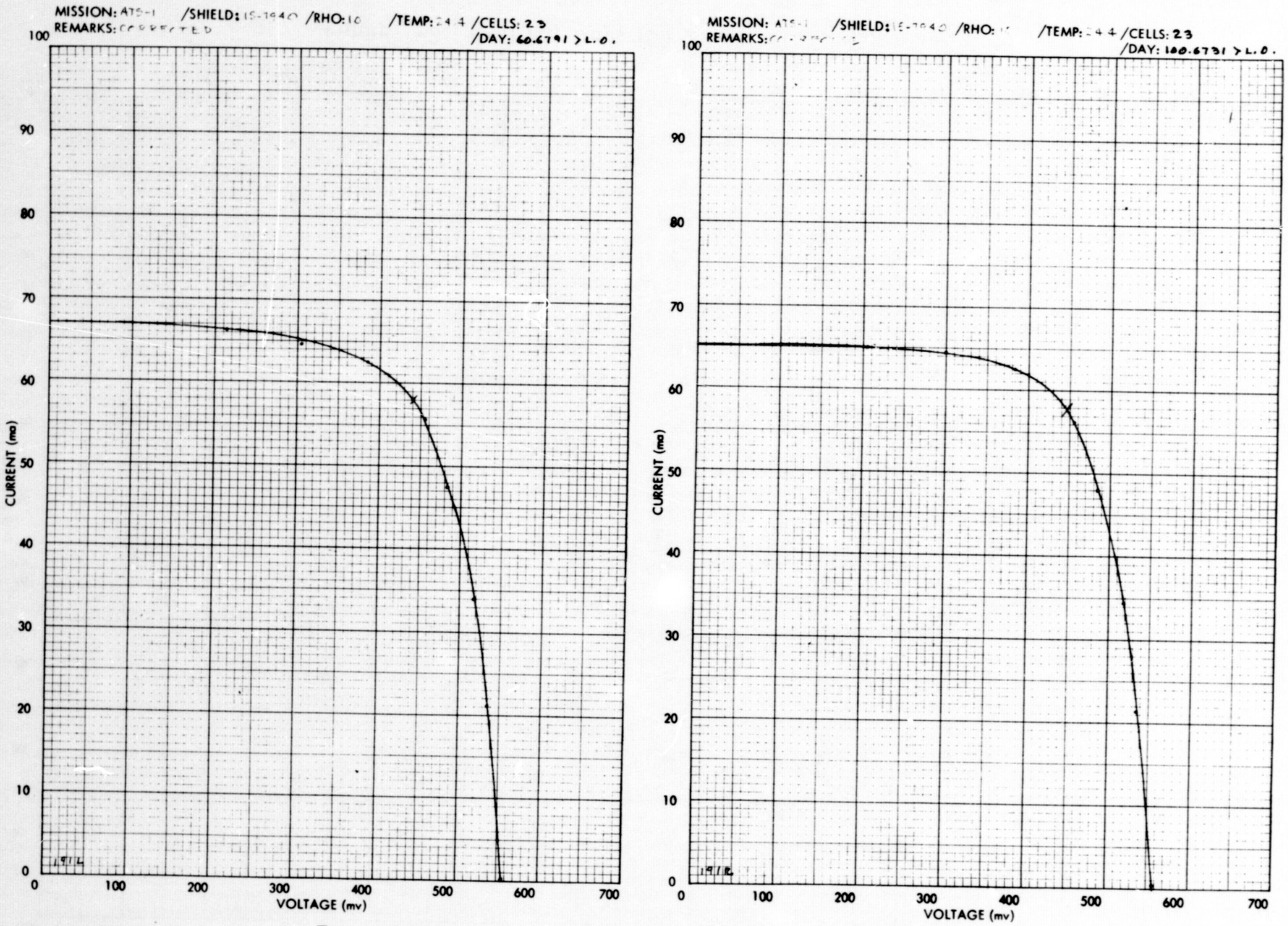
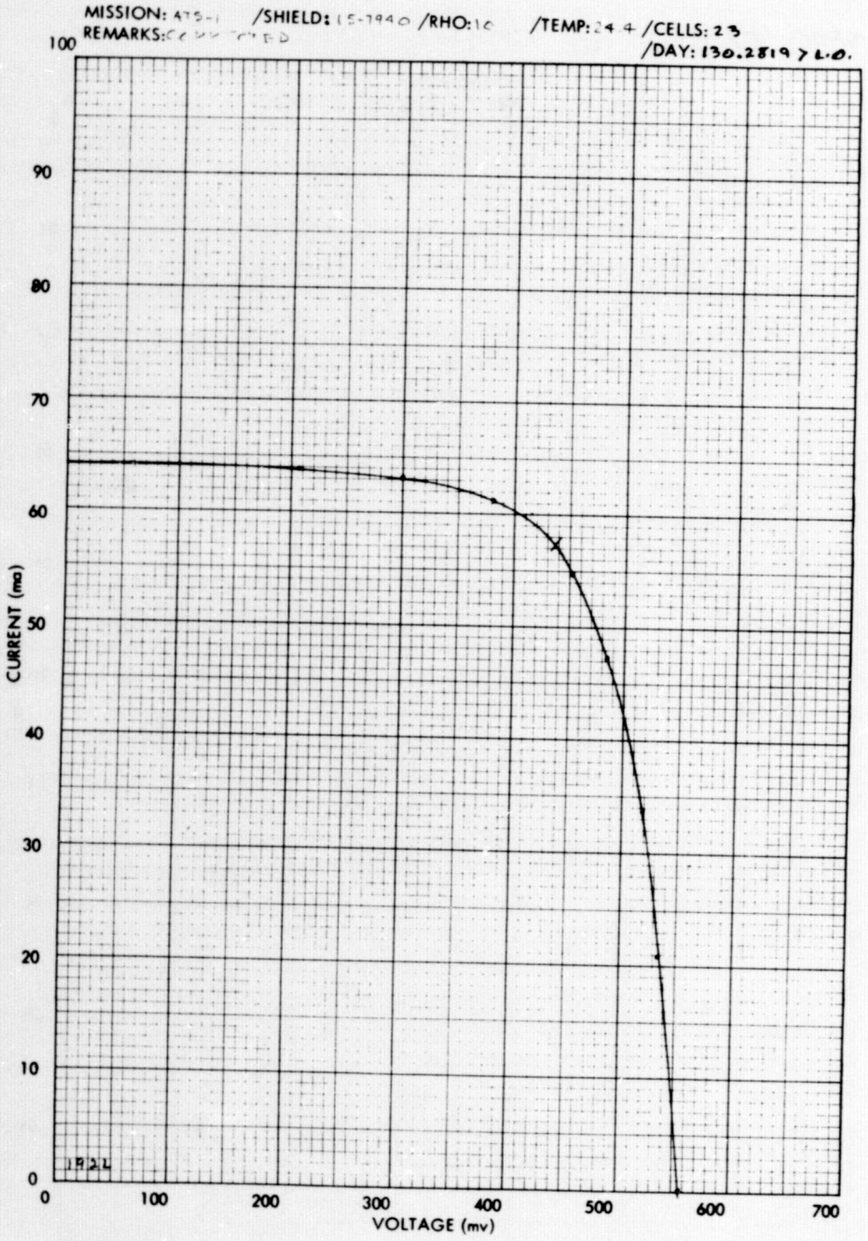


Figure 191. Cell 23, Days 60.6 and 100.6. Corrected Data



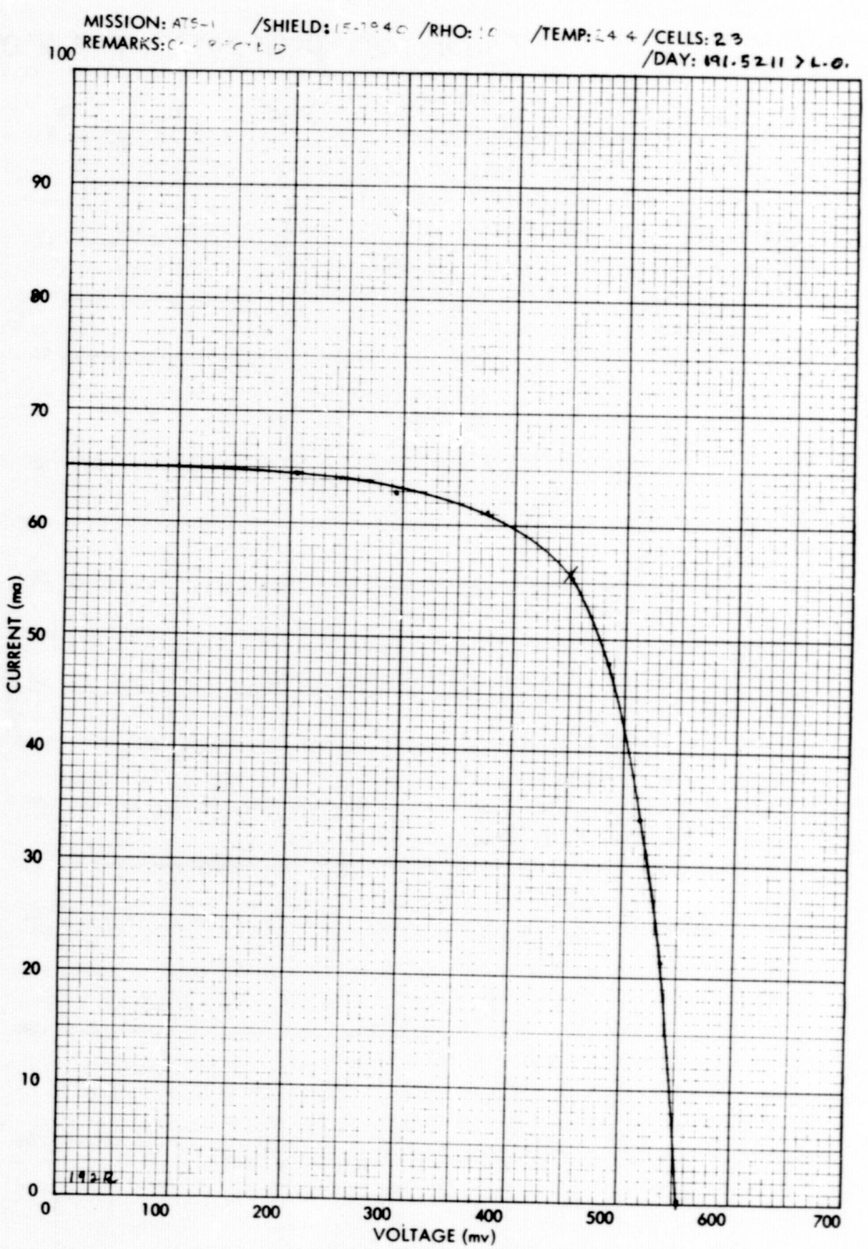
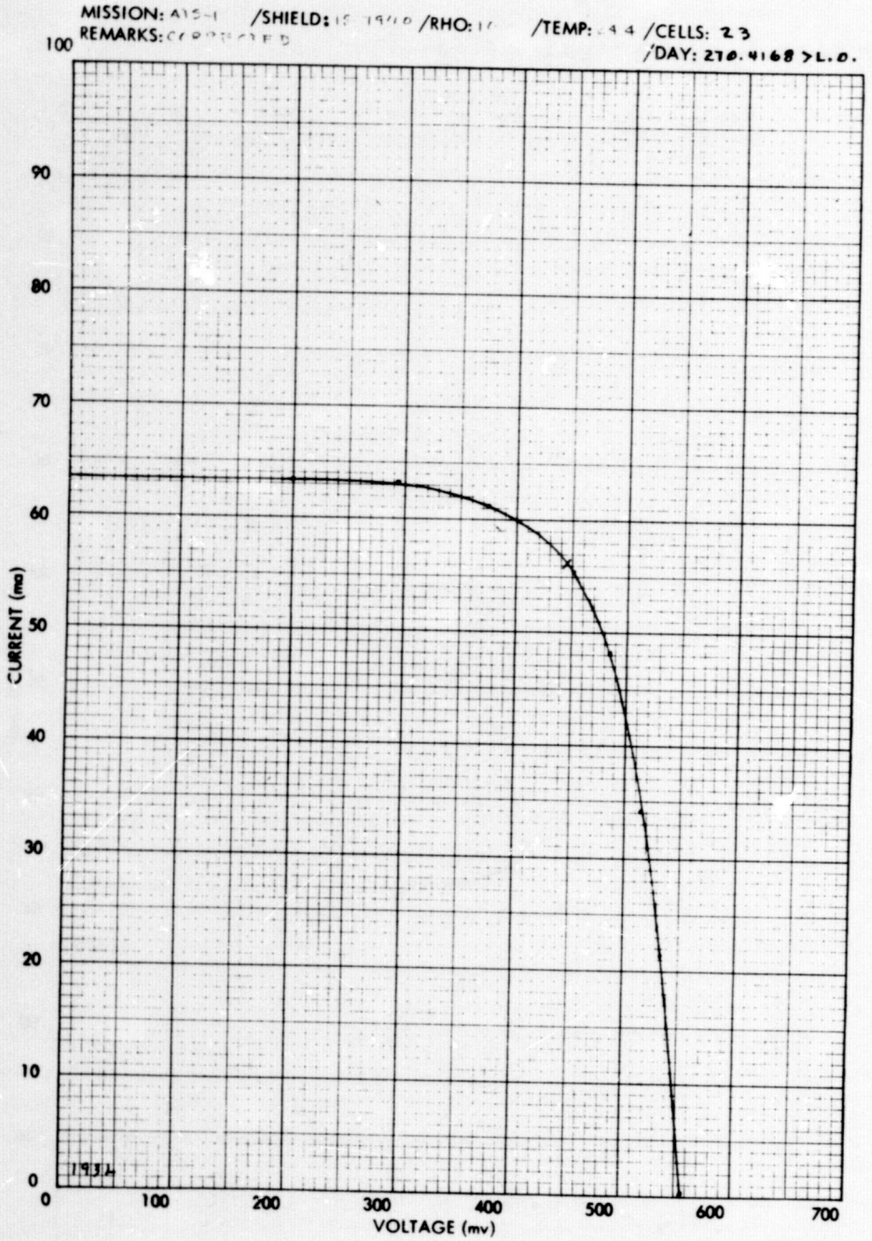


Figure 192. Cell 23, Days 130.2 and 191.5. Corrected Data



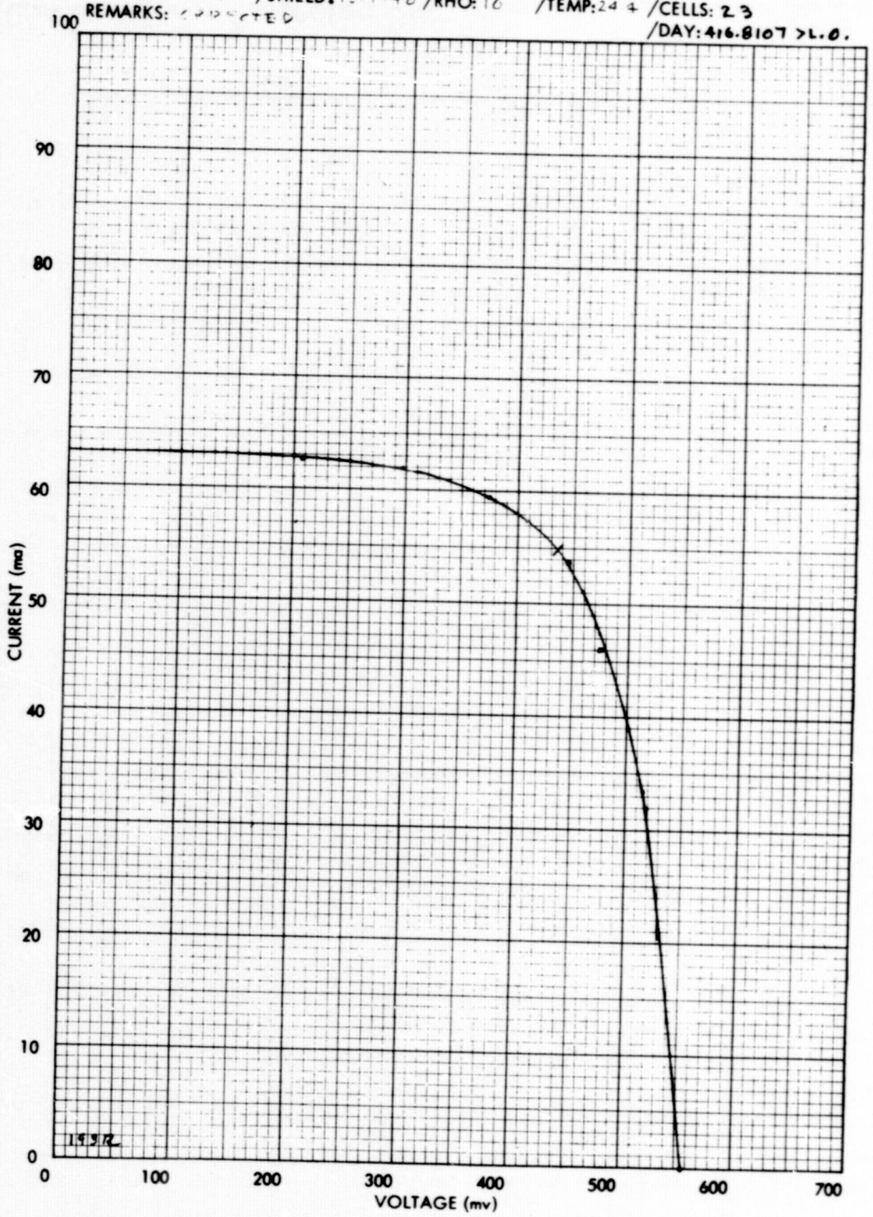


Figure 193. Cell 23, Days 270.4 and 416.8. Corrected Data

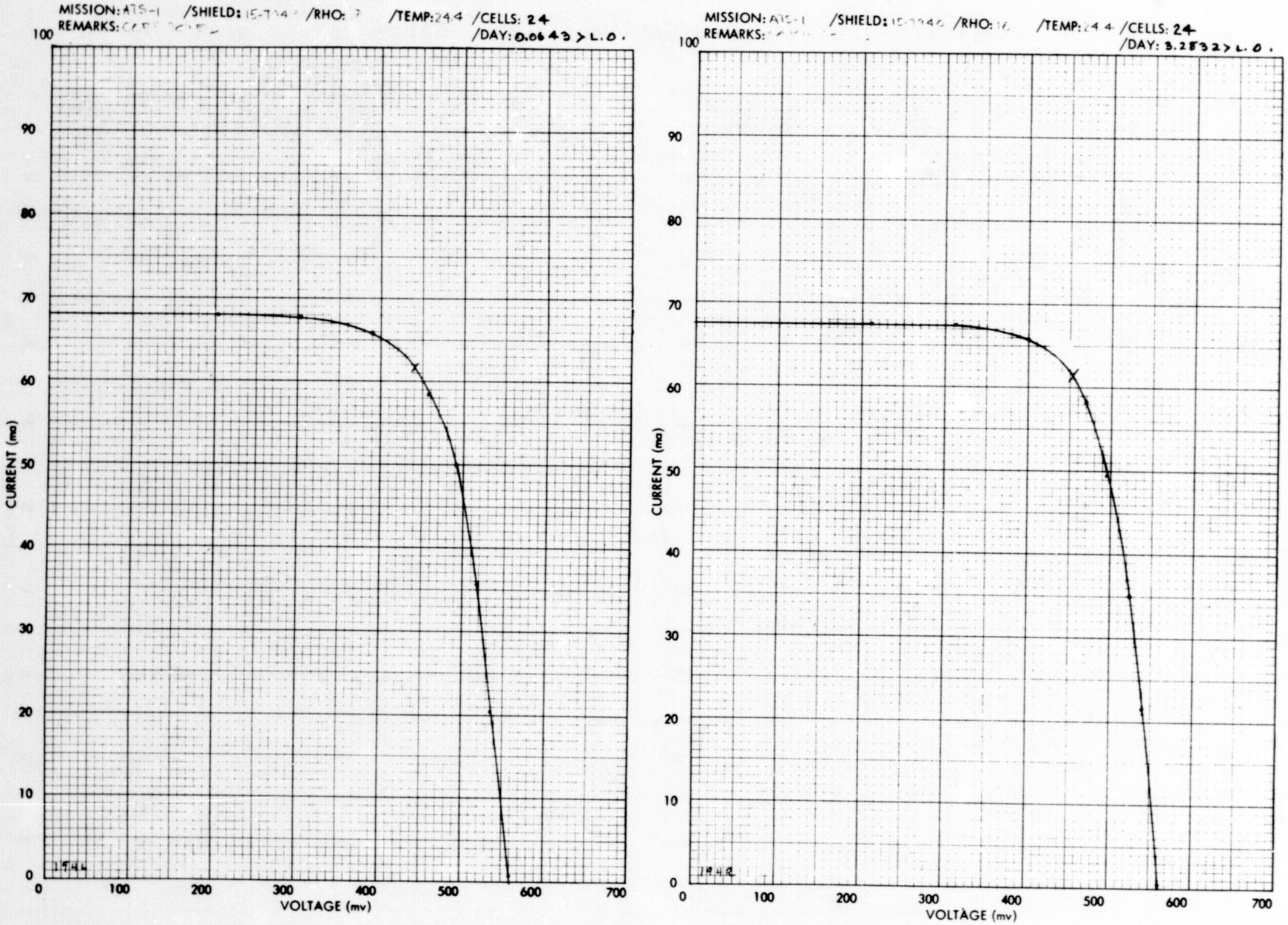
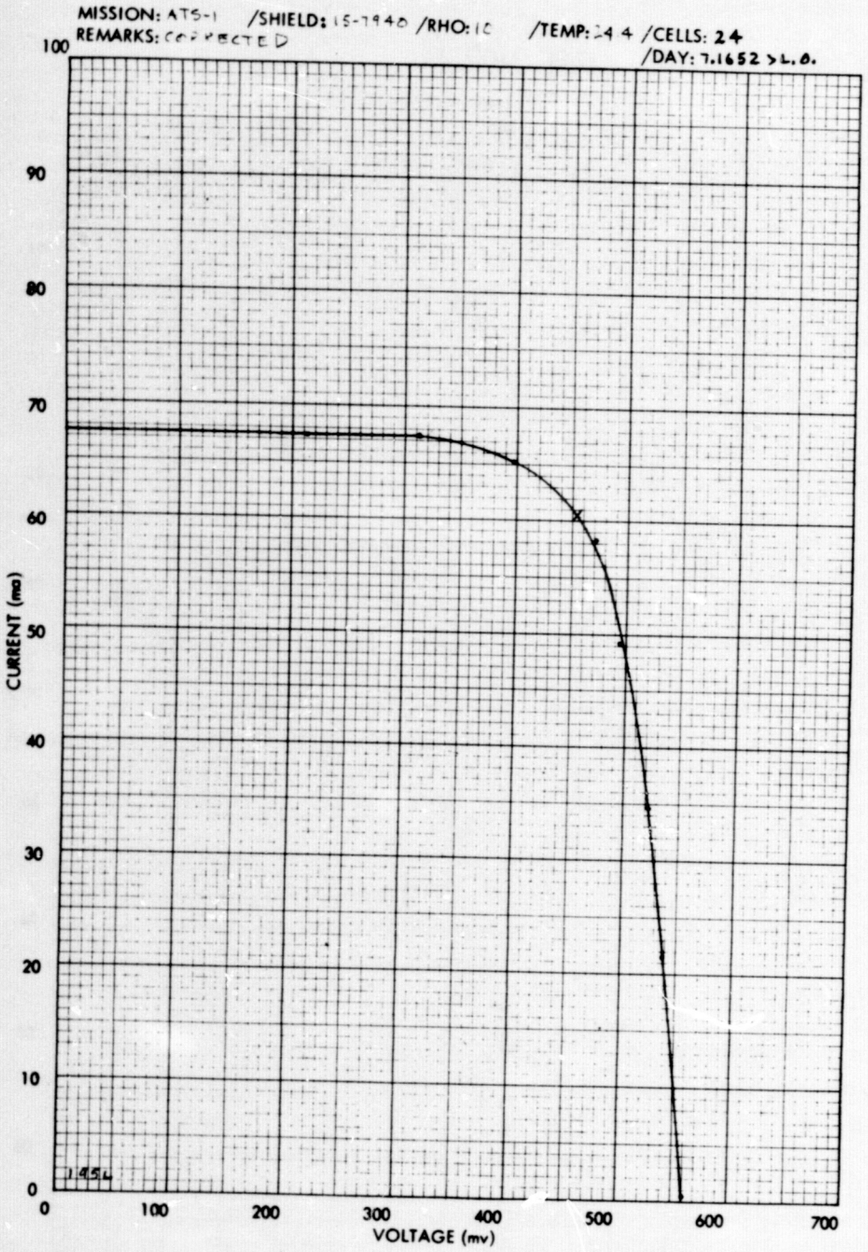


Figure 194. Cell 24, Days 0.064 and 3.2. Corrected Data



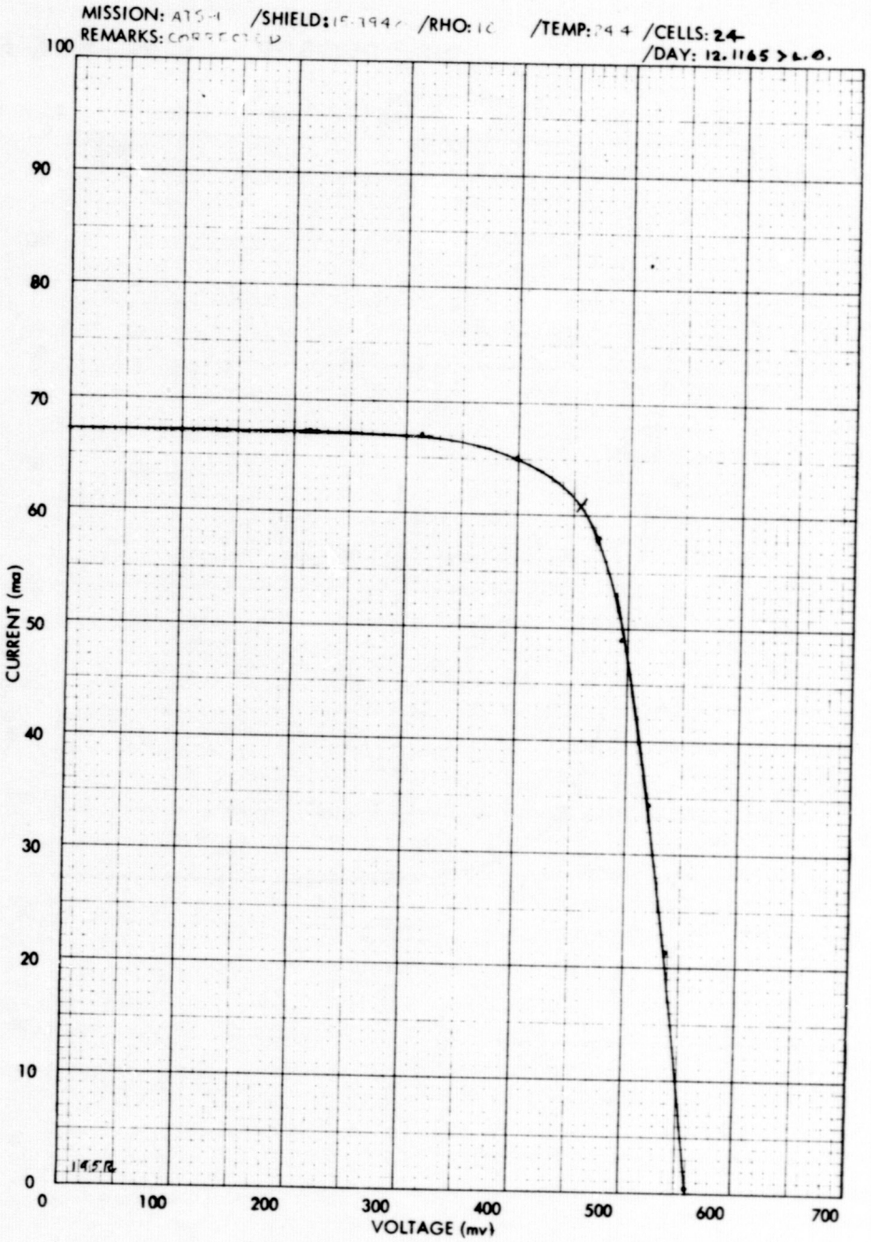
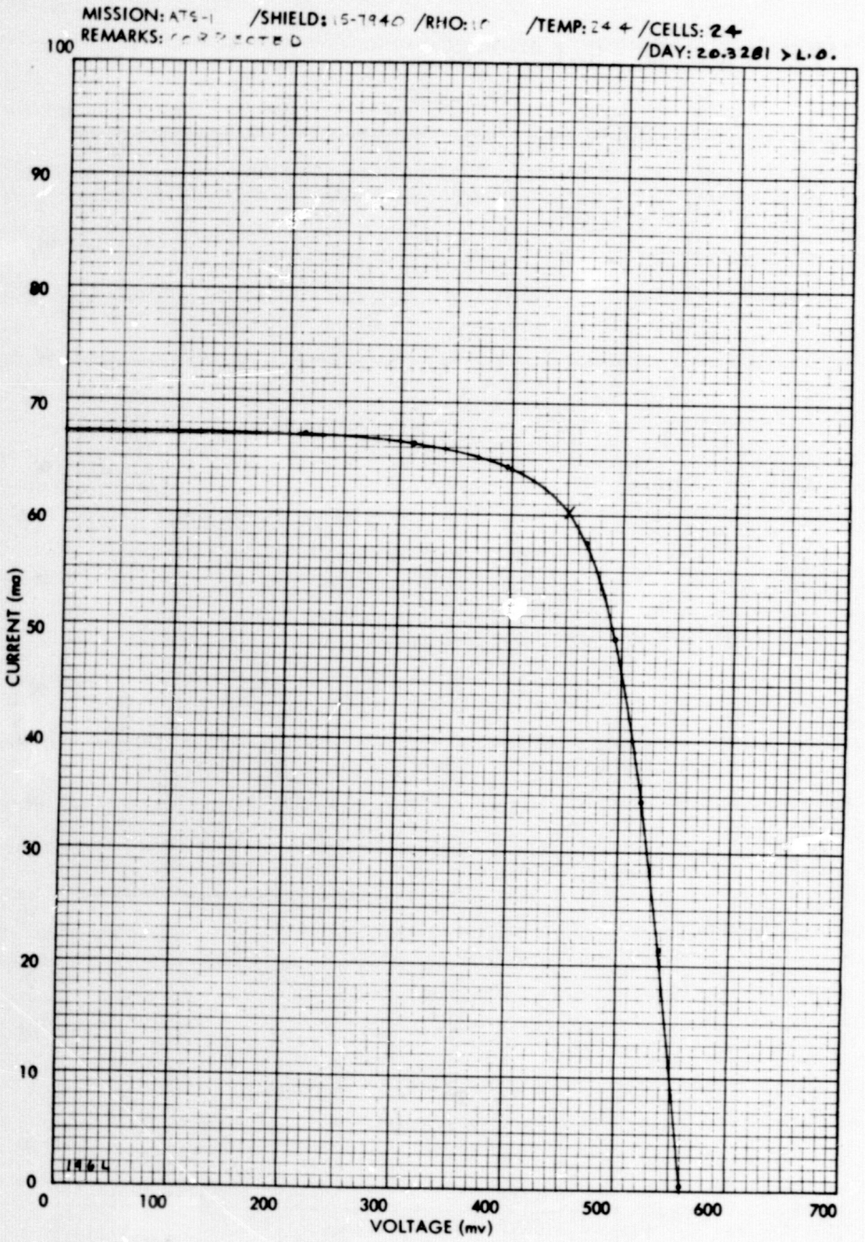


Figure 195. Cell 24, Days 7.1 and 12.1. Corrected Data



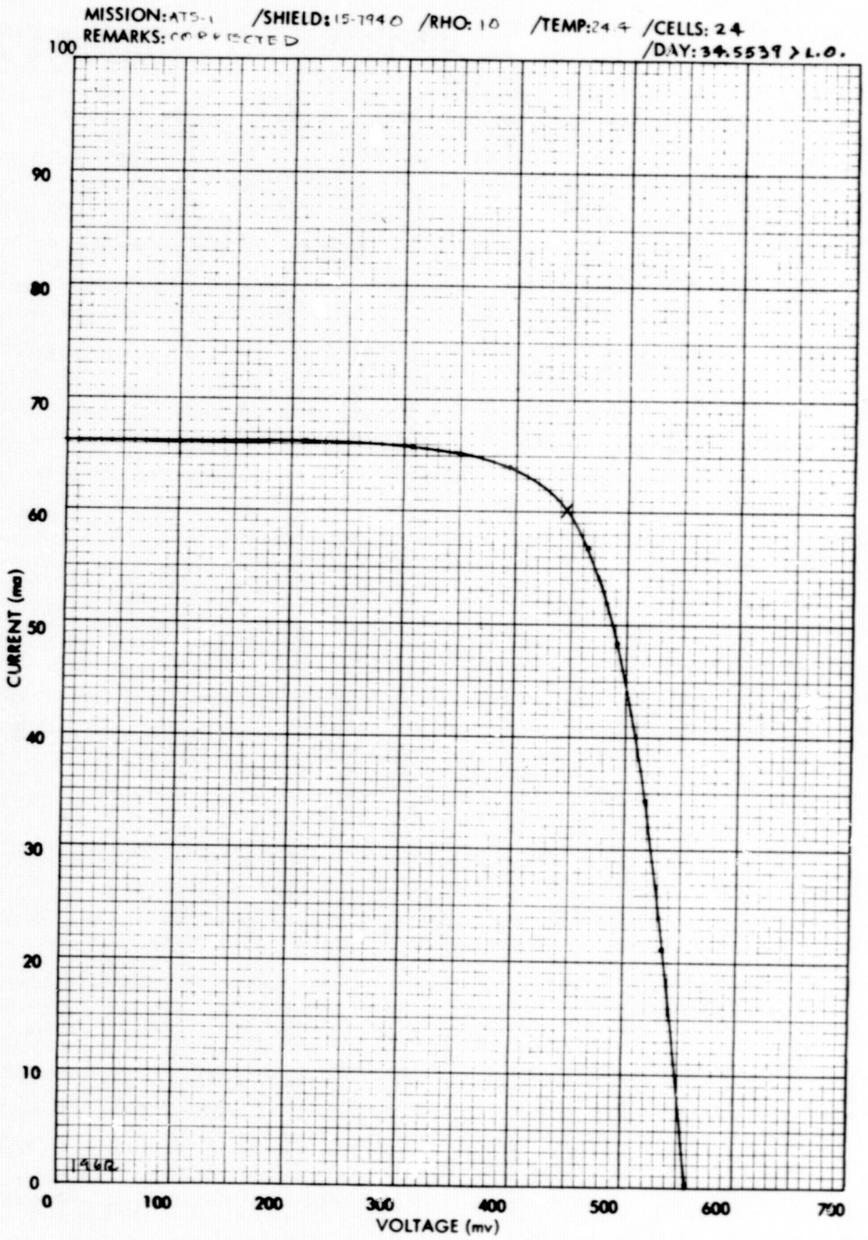
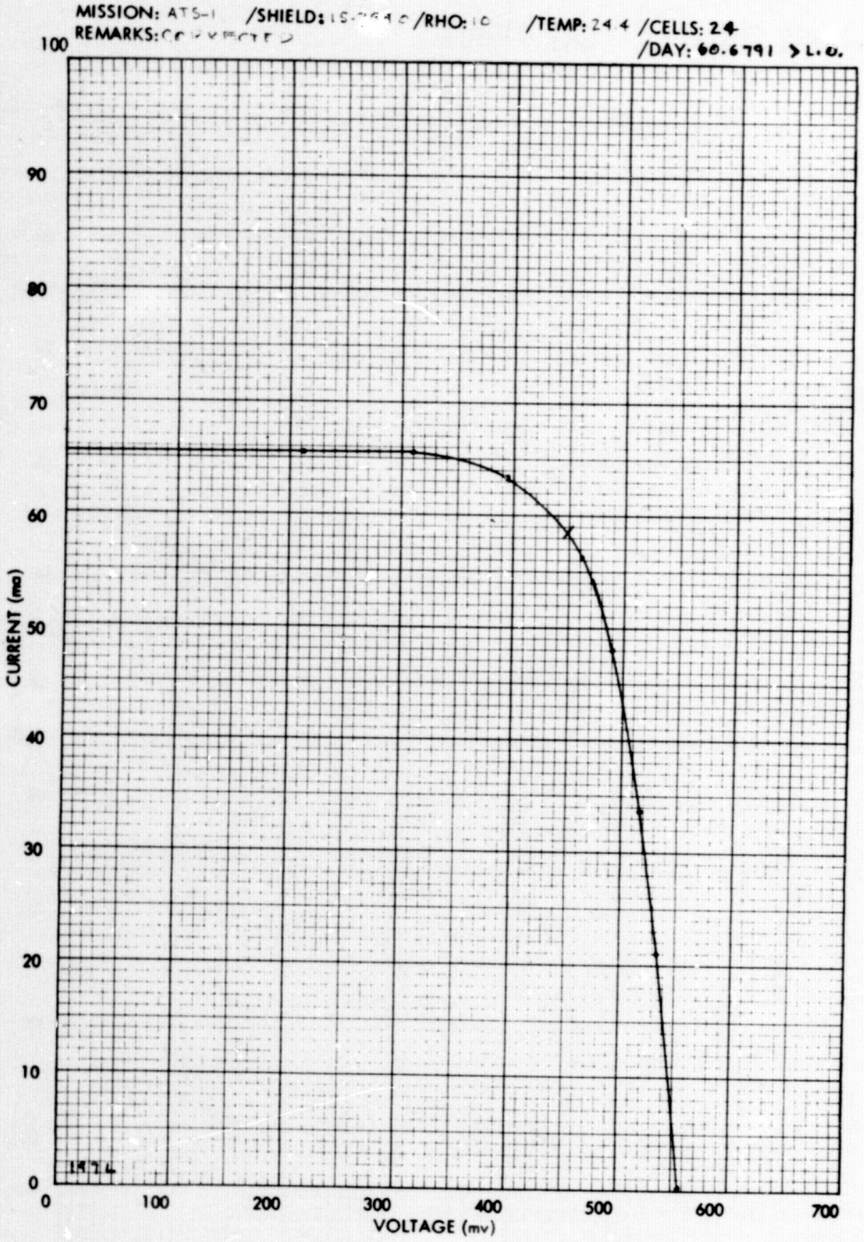


Figure 196. Cell 24, Days 20.3 and 34.5. Corrected Data



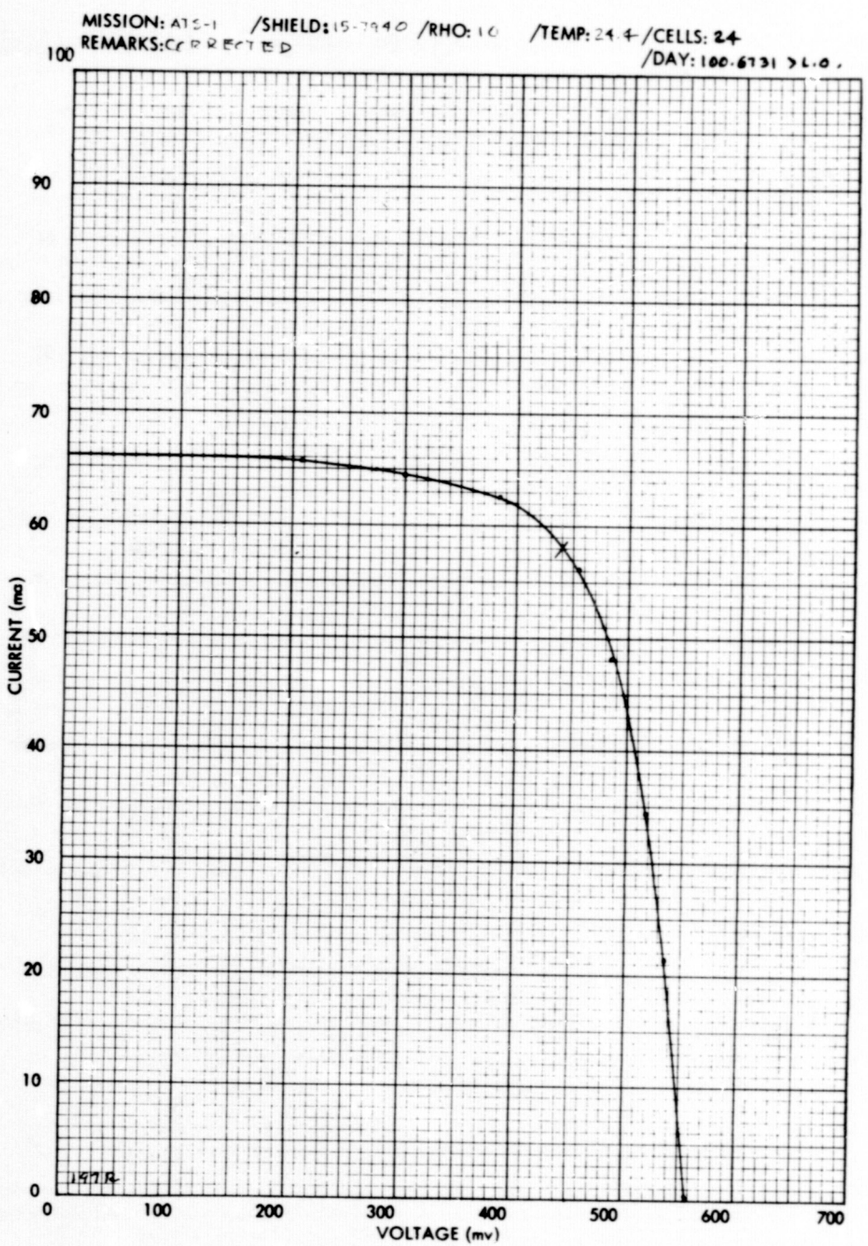
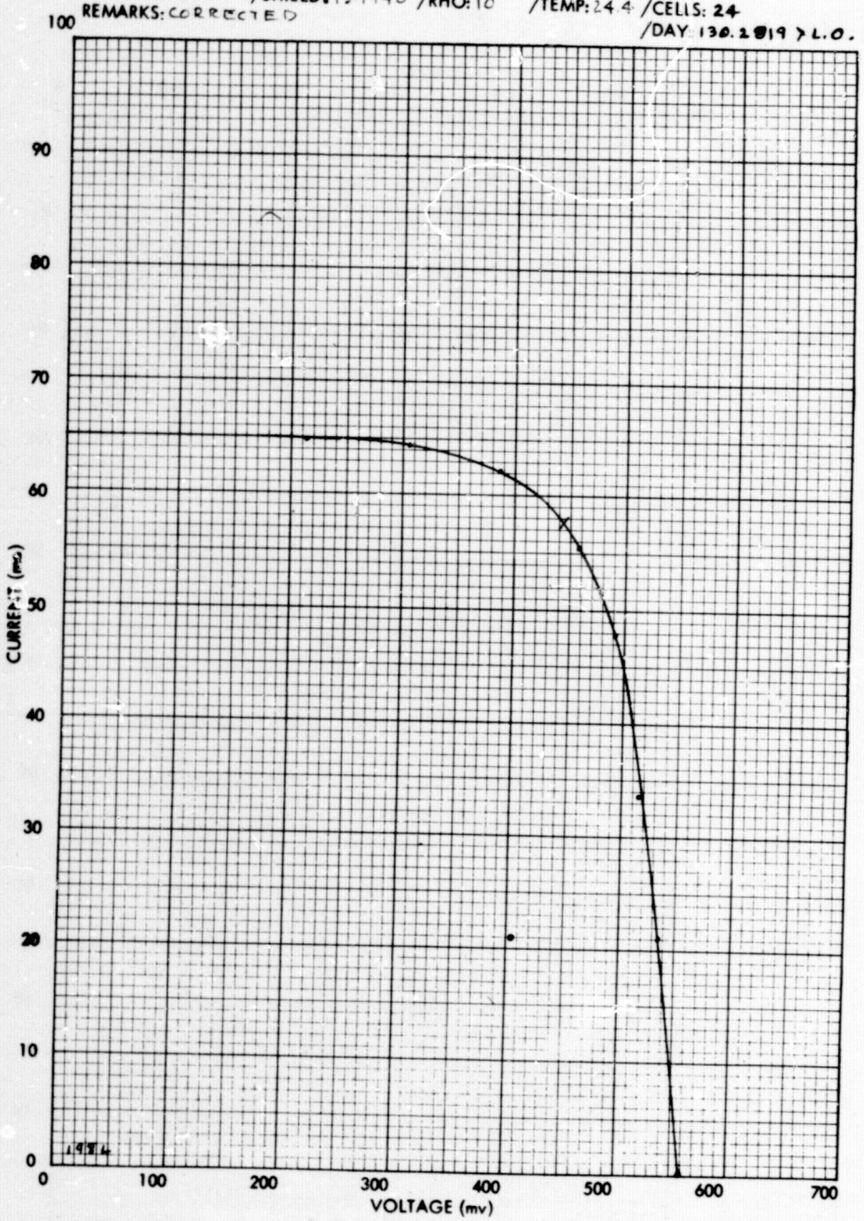


Figure 197. Cell 24, Days 60.6 and 100.6. Corrected Data



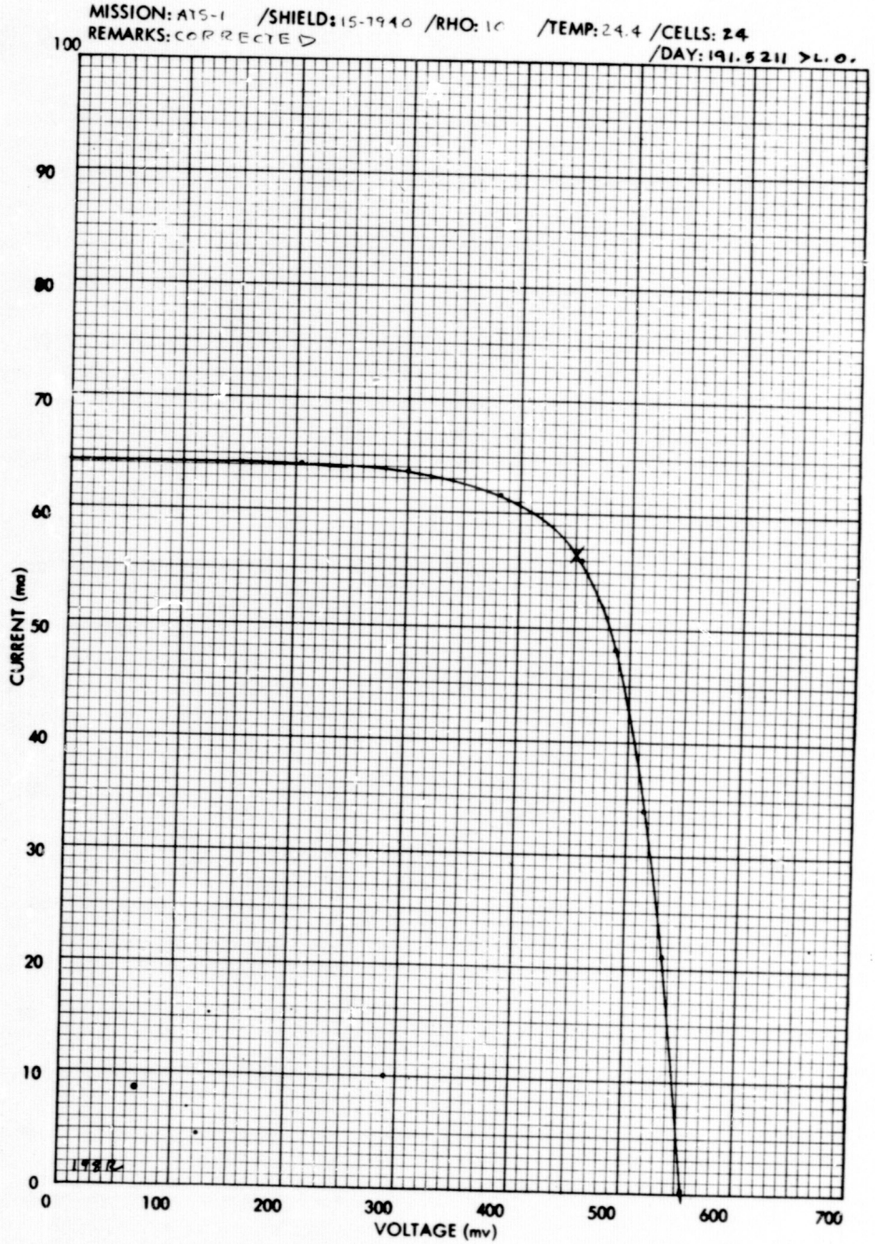


Figure 198. Cell 24, Days 130.2 and 191.5. Corrected Data

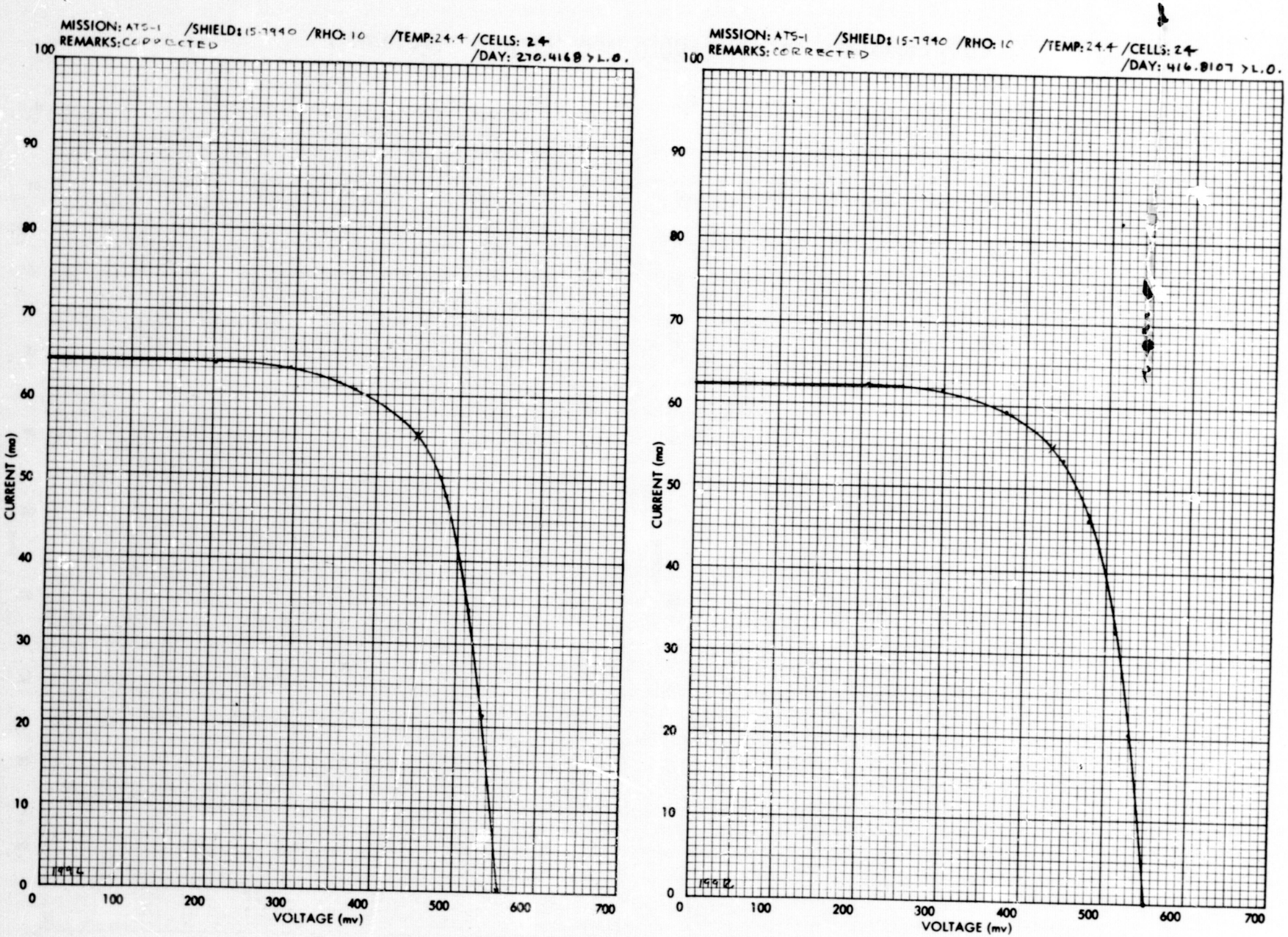
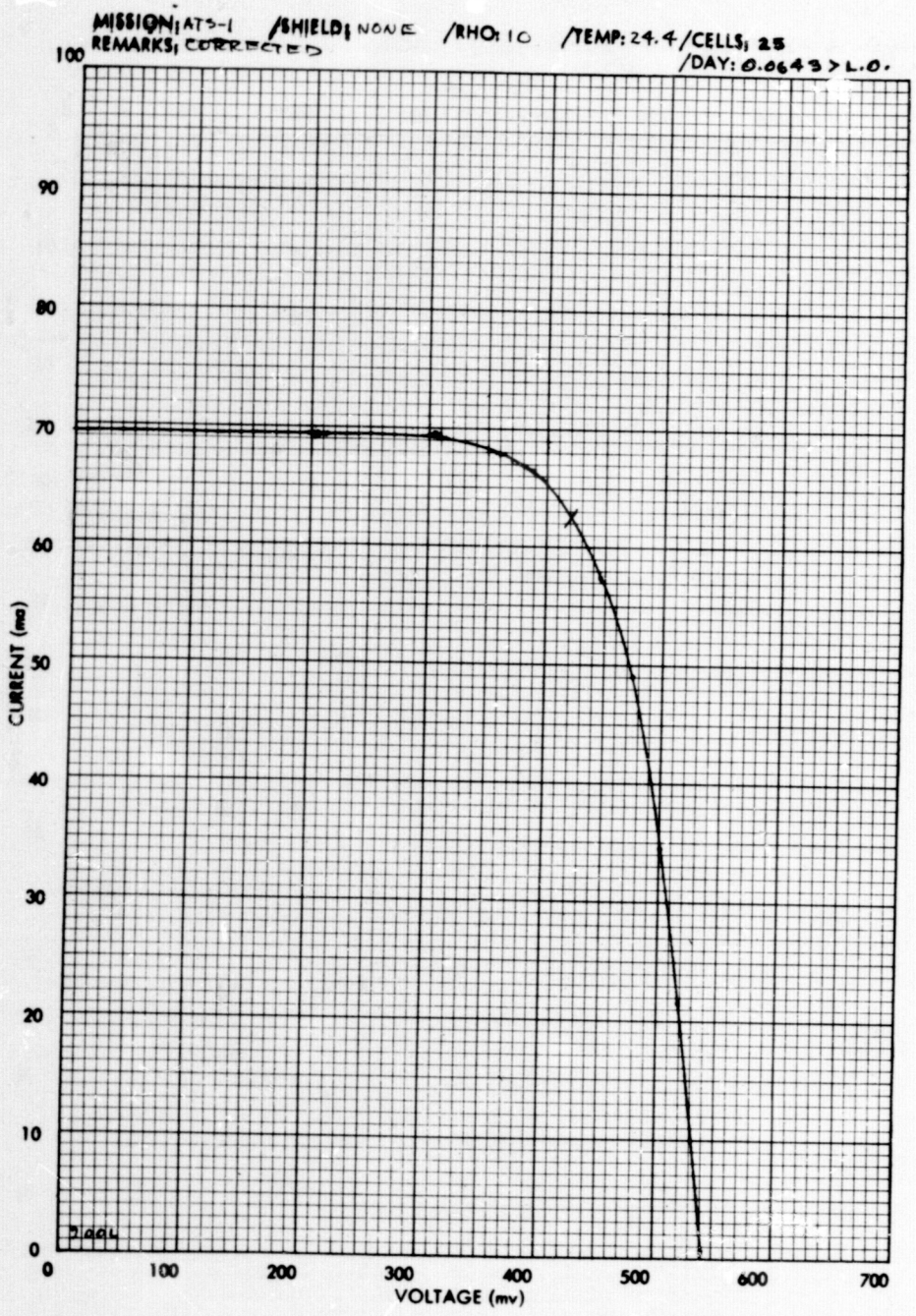


Figure 199. Cell 24, Days 270.4 and 416.8. Corrected Data



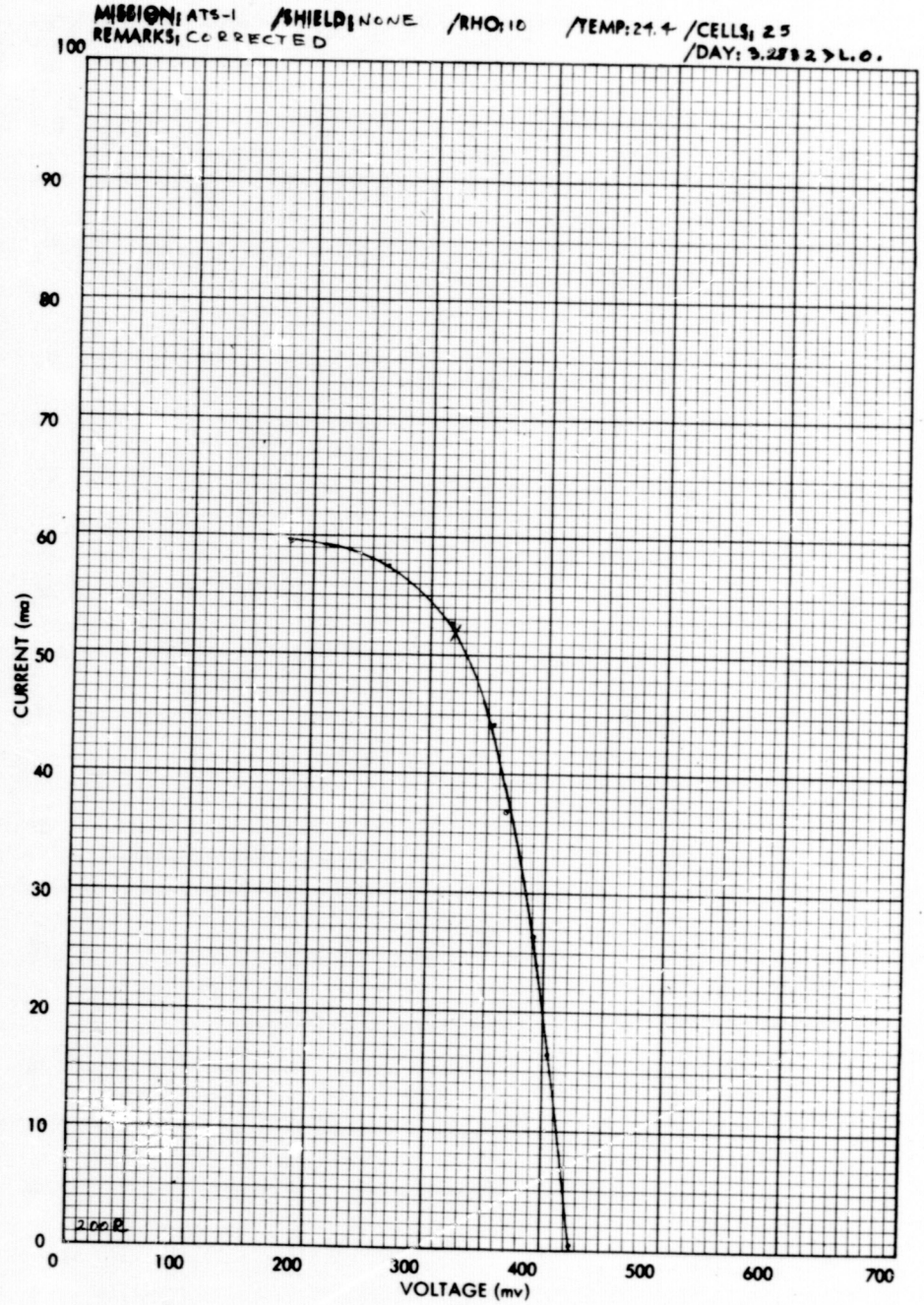


Figure 200. Cell 25, Days 0.064 and 3.2. Corrected Data

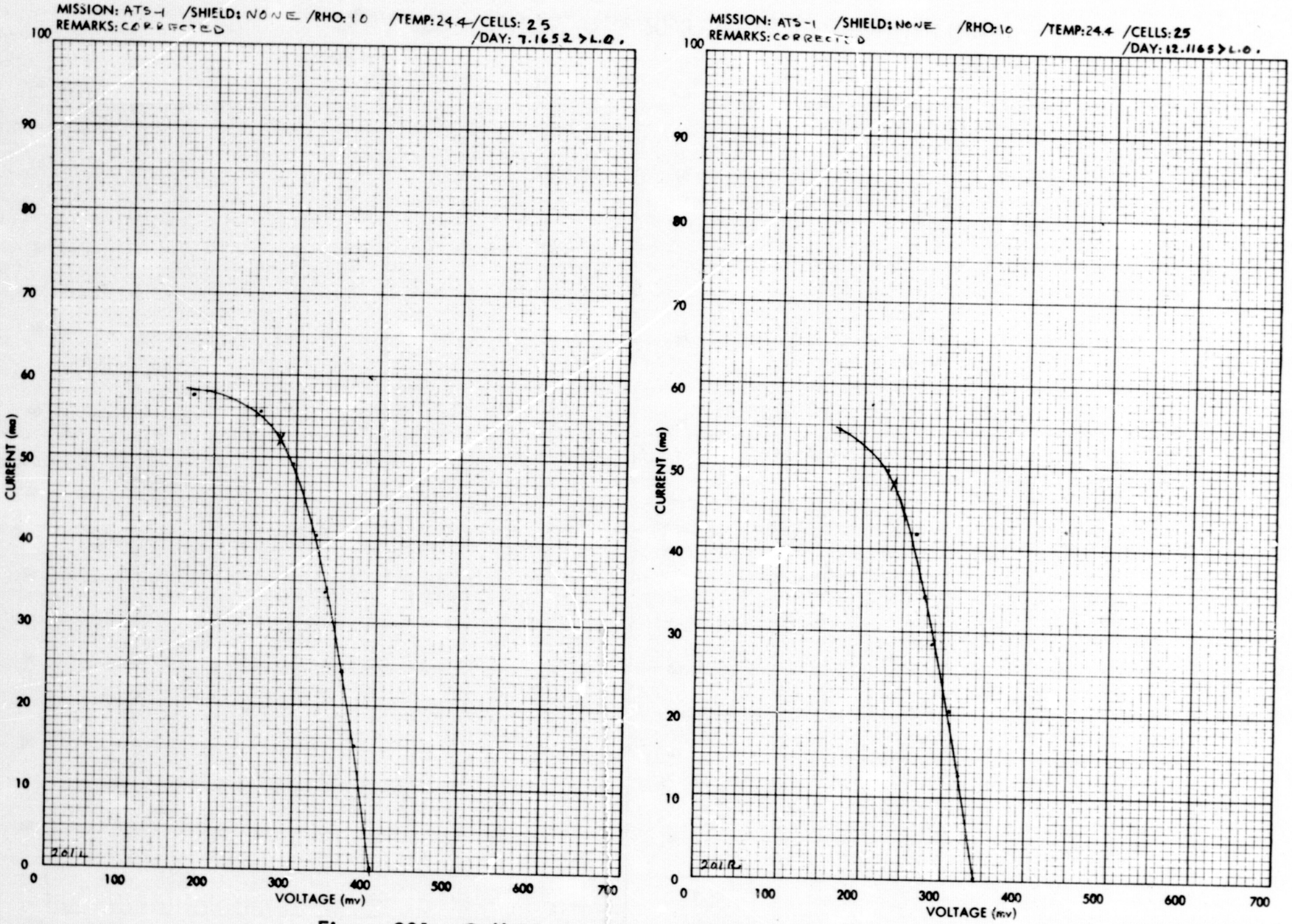
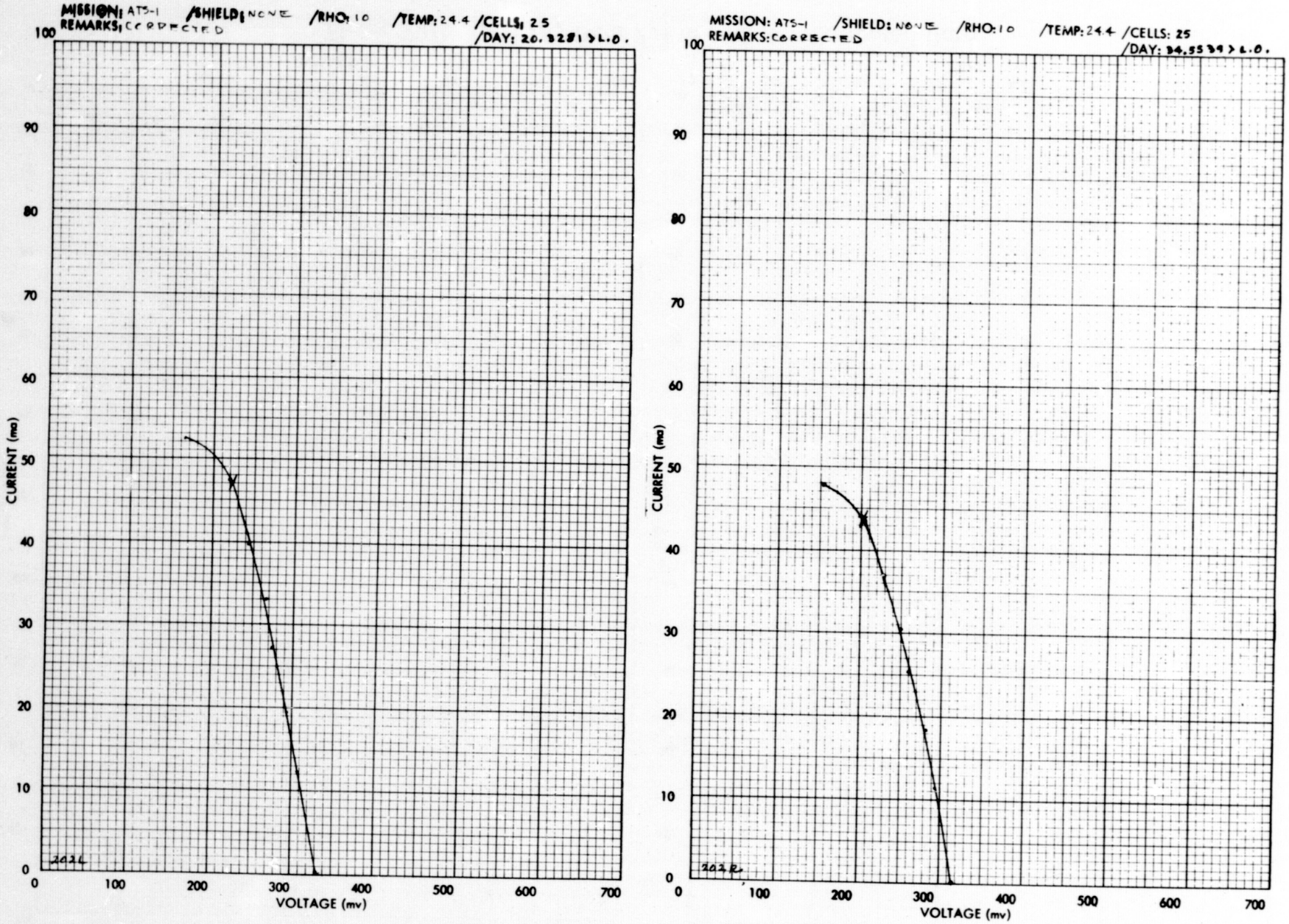


Figure 201. Cell 25, Days 7.1 and 12.1. Corrected Data



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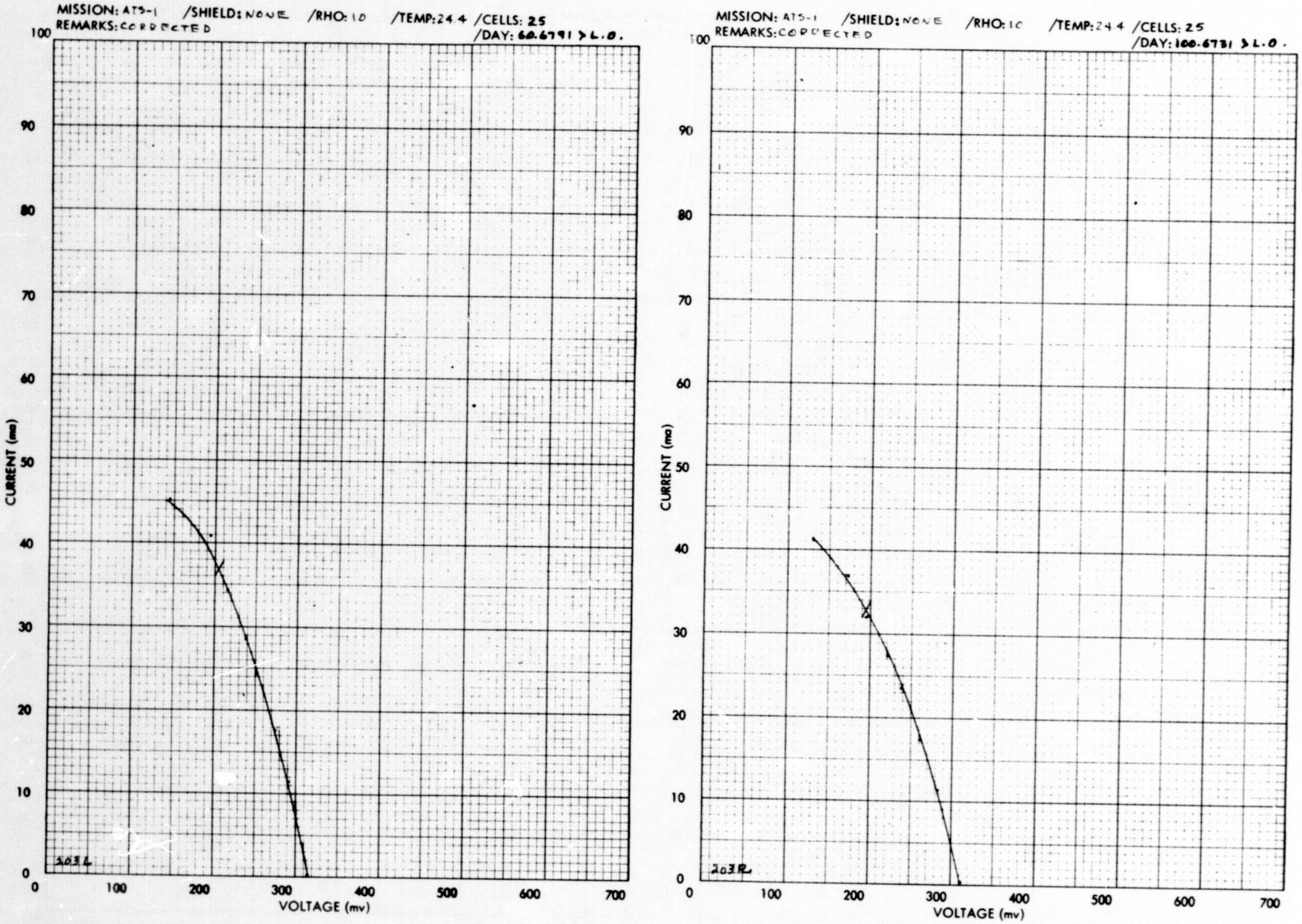


Figure 203. Cell 25, Days 60.6 and 100.6. Corrected Data

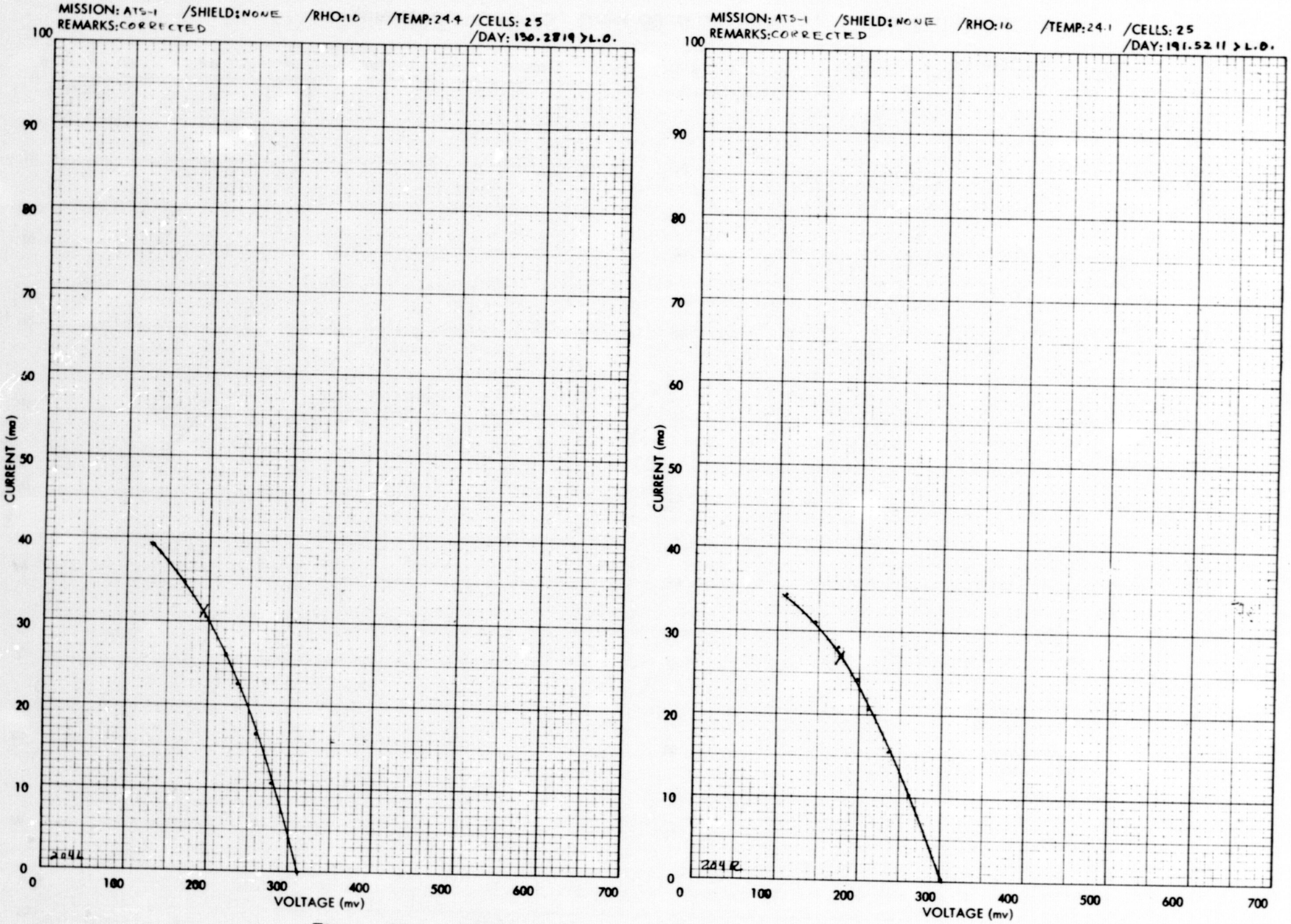
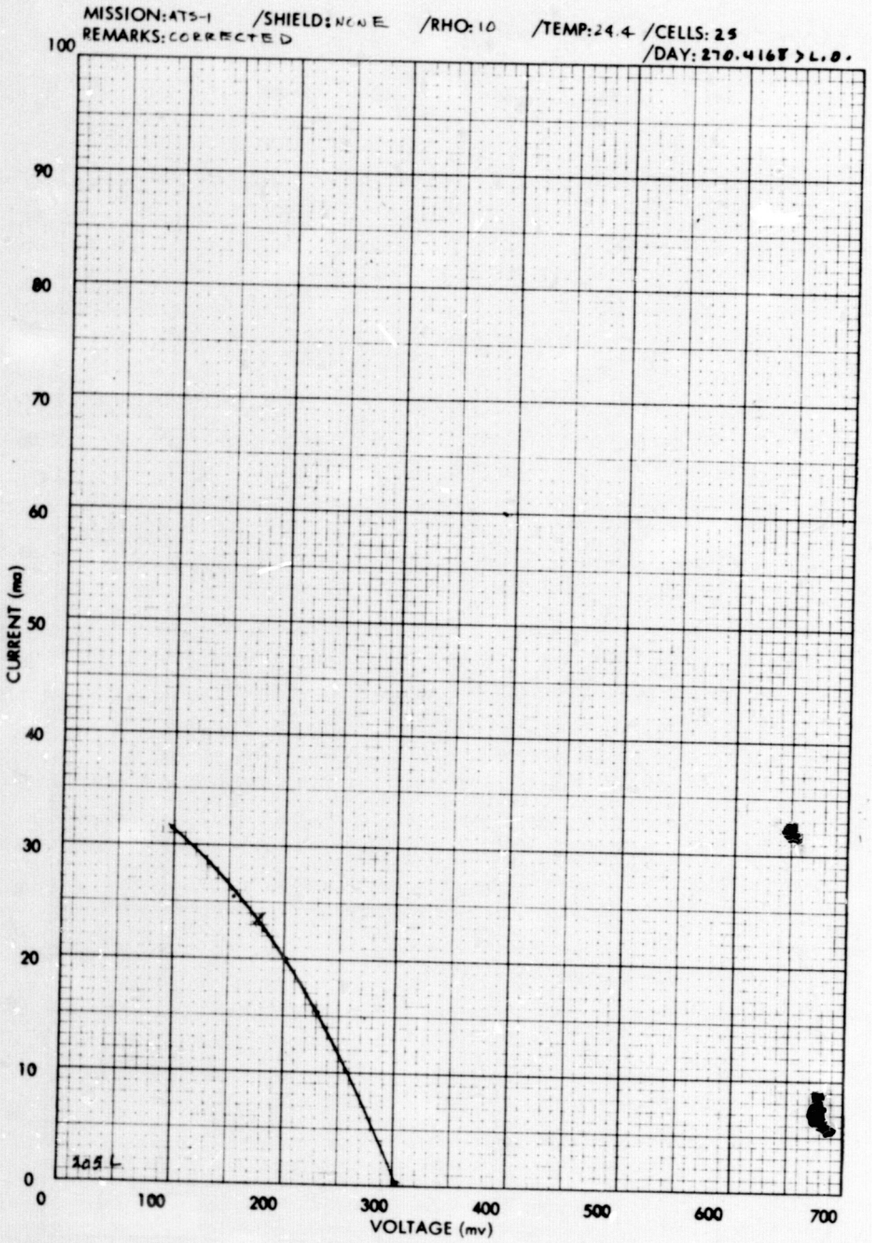
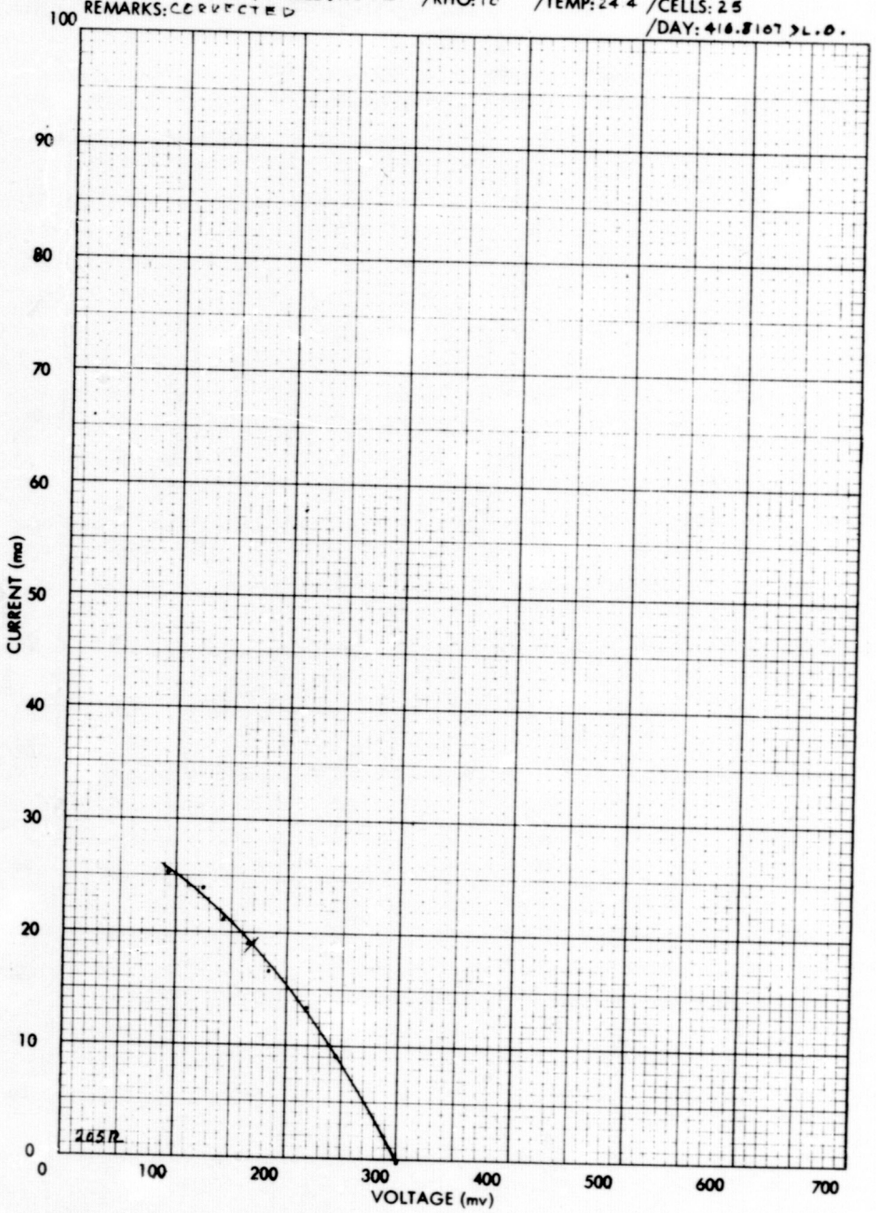


Figure 204. Cell 25, Days 130.2 and 191.5. Corrected Data





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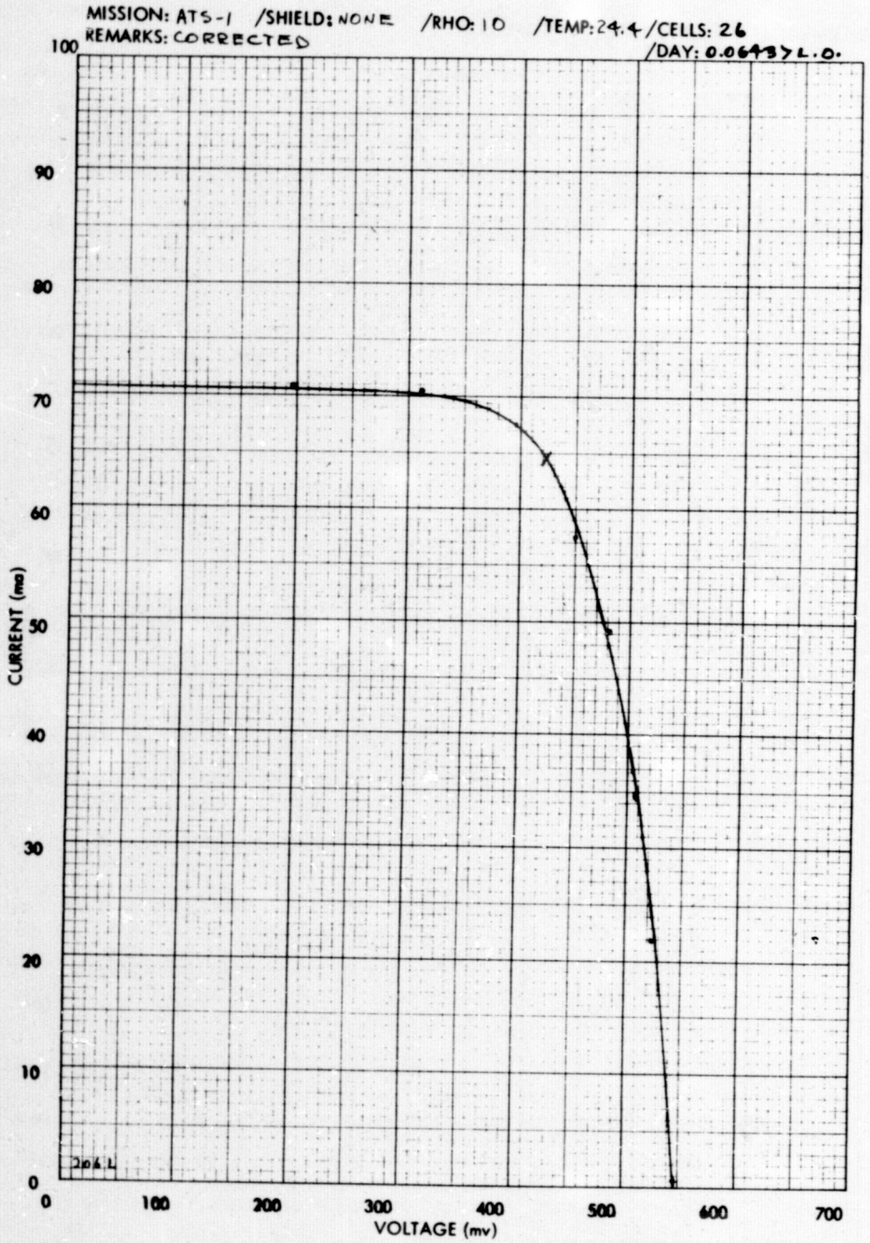


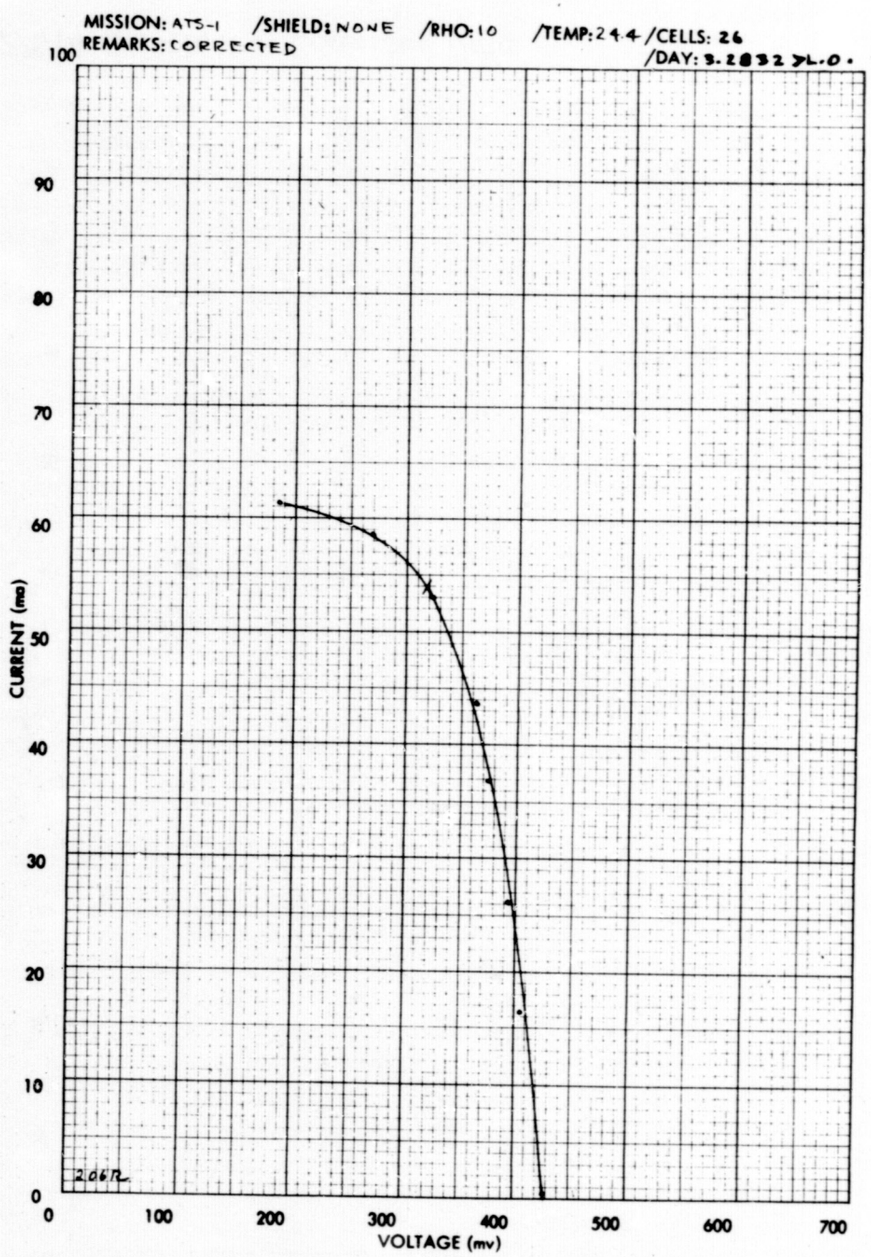


Figure 206. Cell 26, Days 0.064 and 3.2. Corrected Data

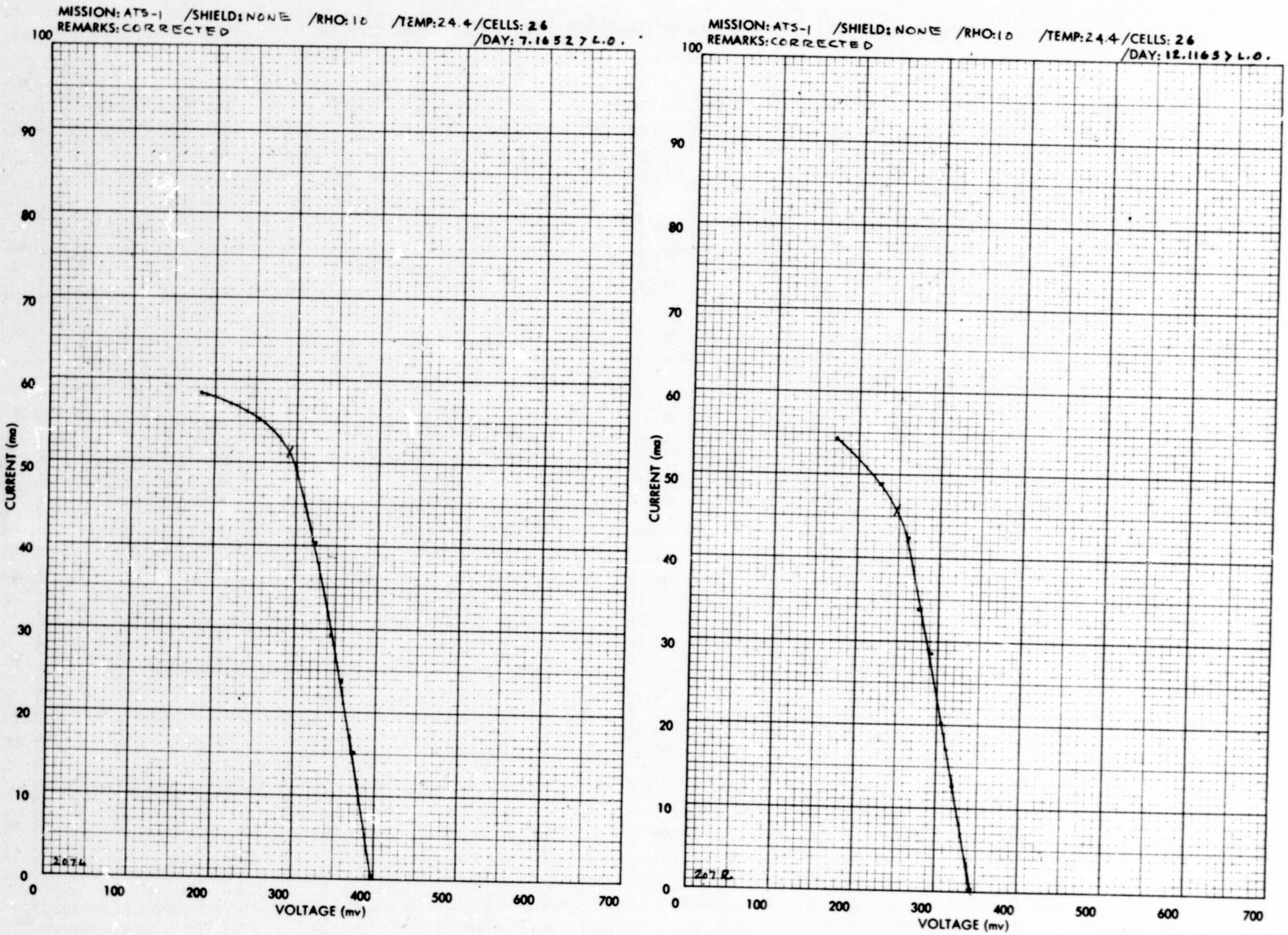


Figure 207. Cell 26, Days 7.1 and 12.1. Corrected Data

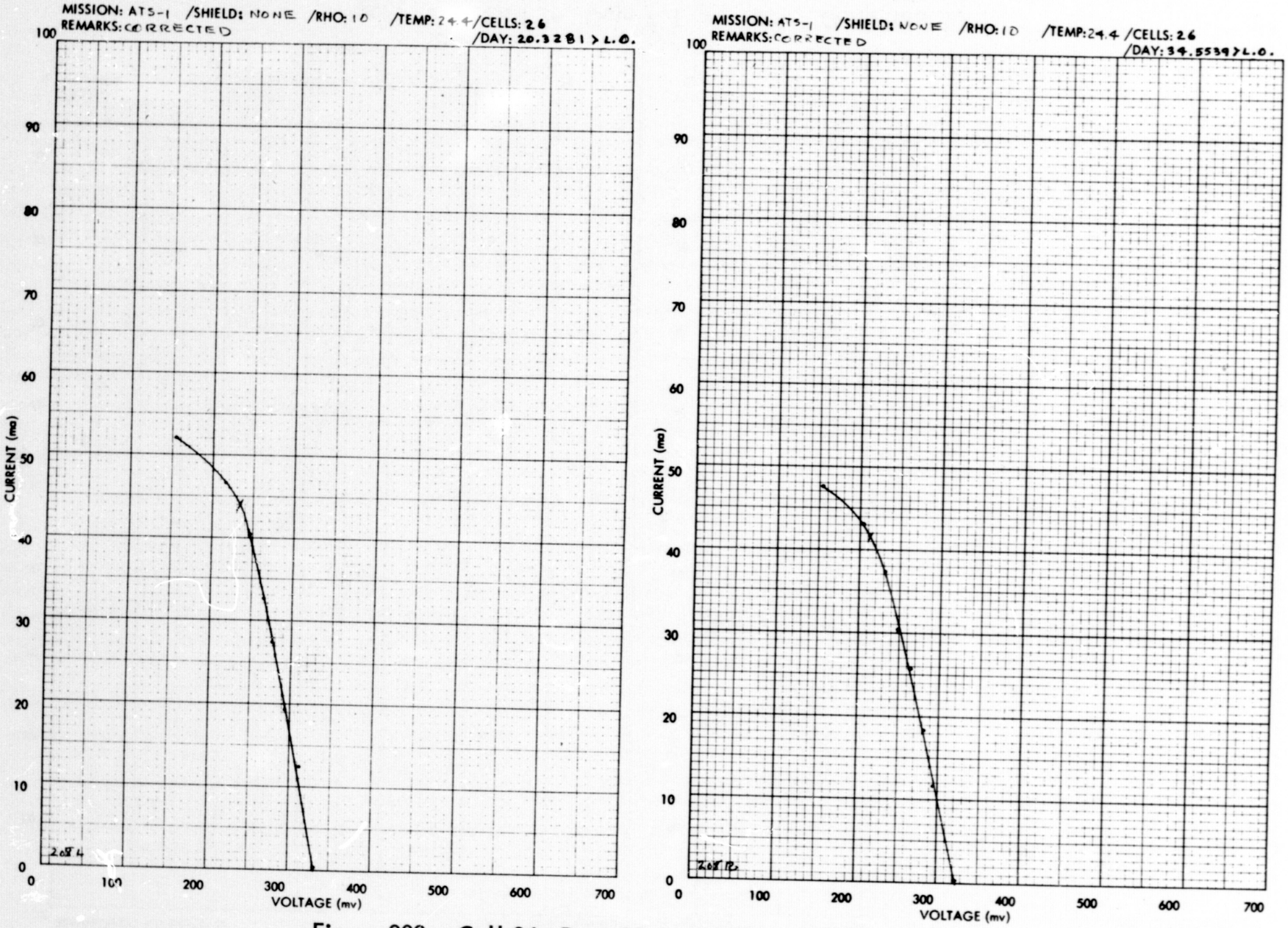
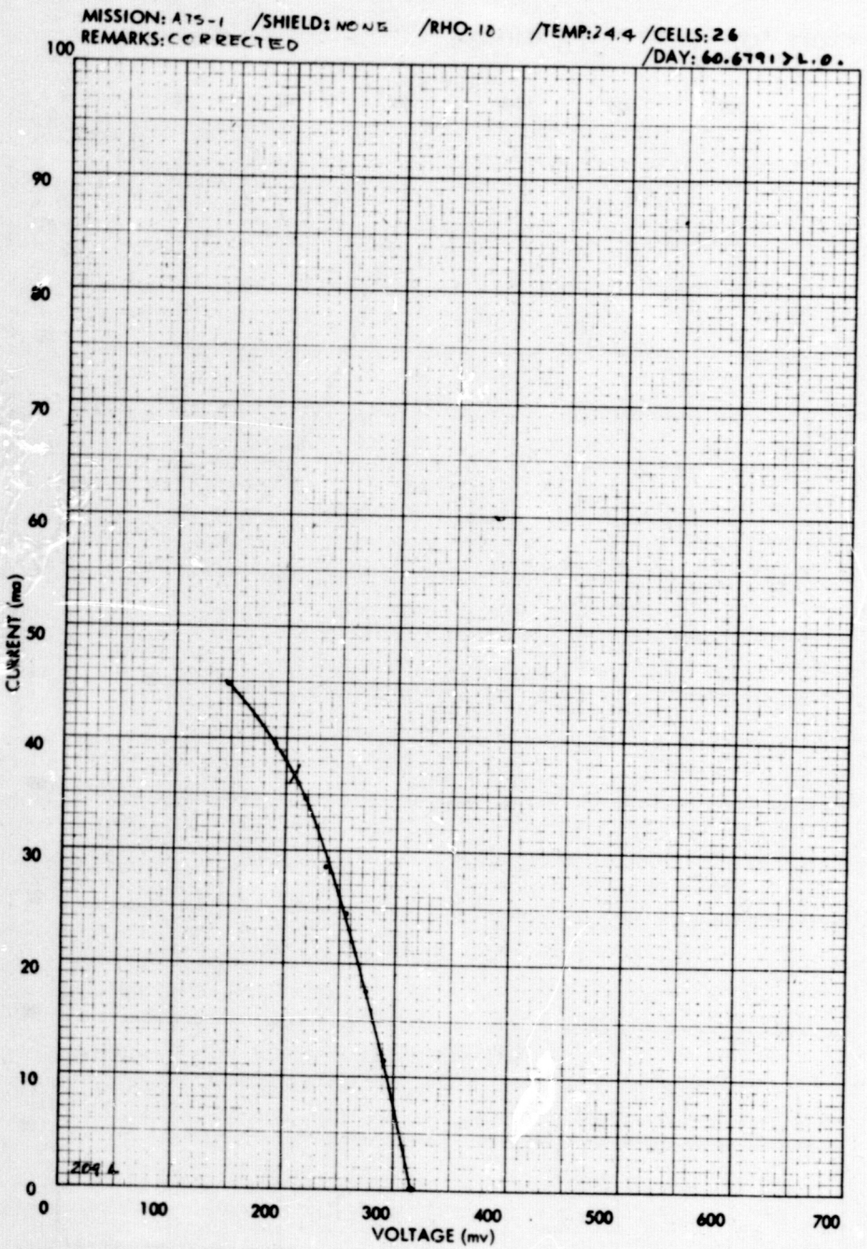


Figure 208. Cell 26, Days 20.3 and 34.5. Corrected Data



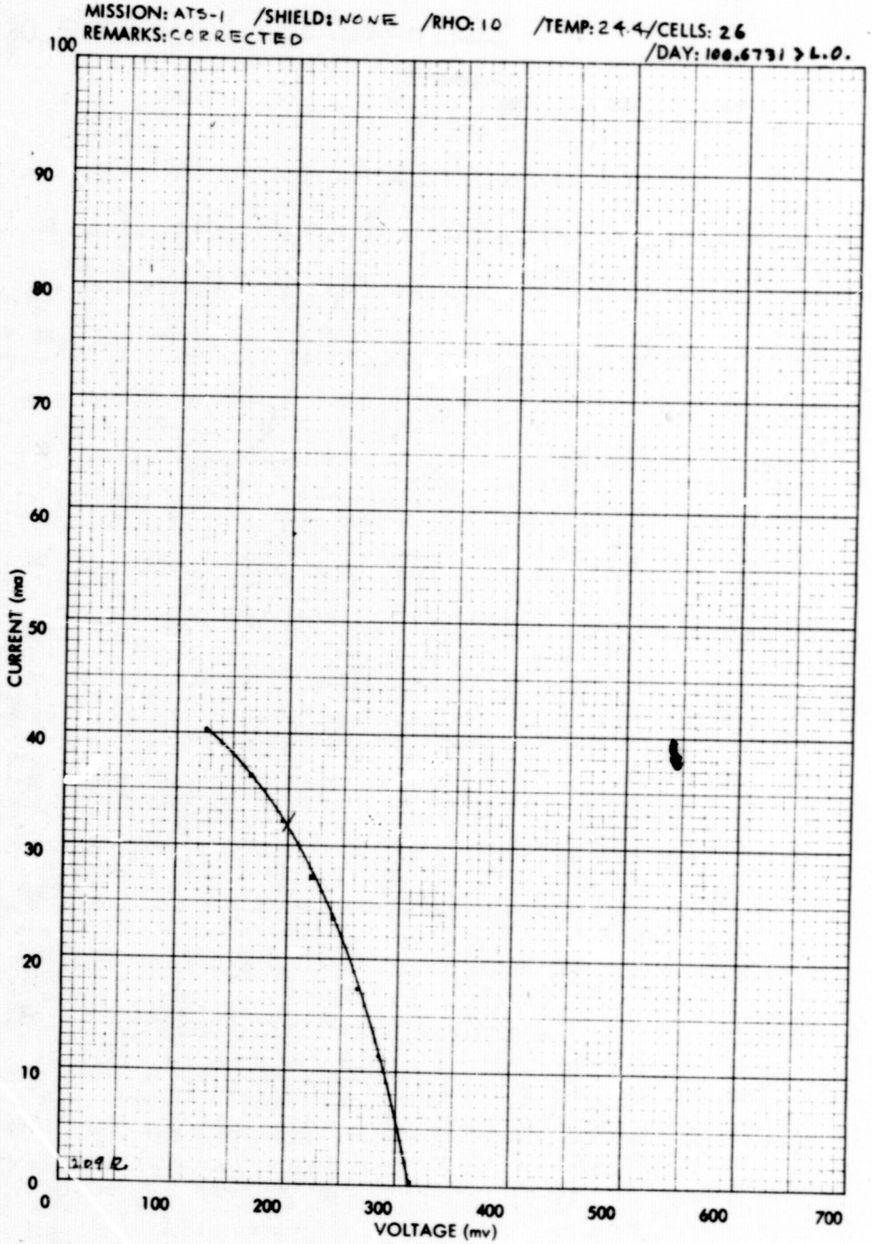
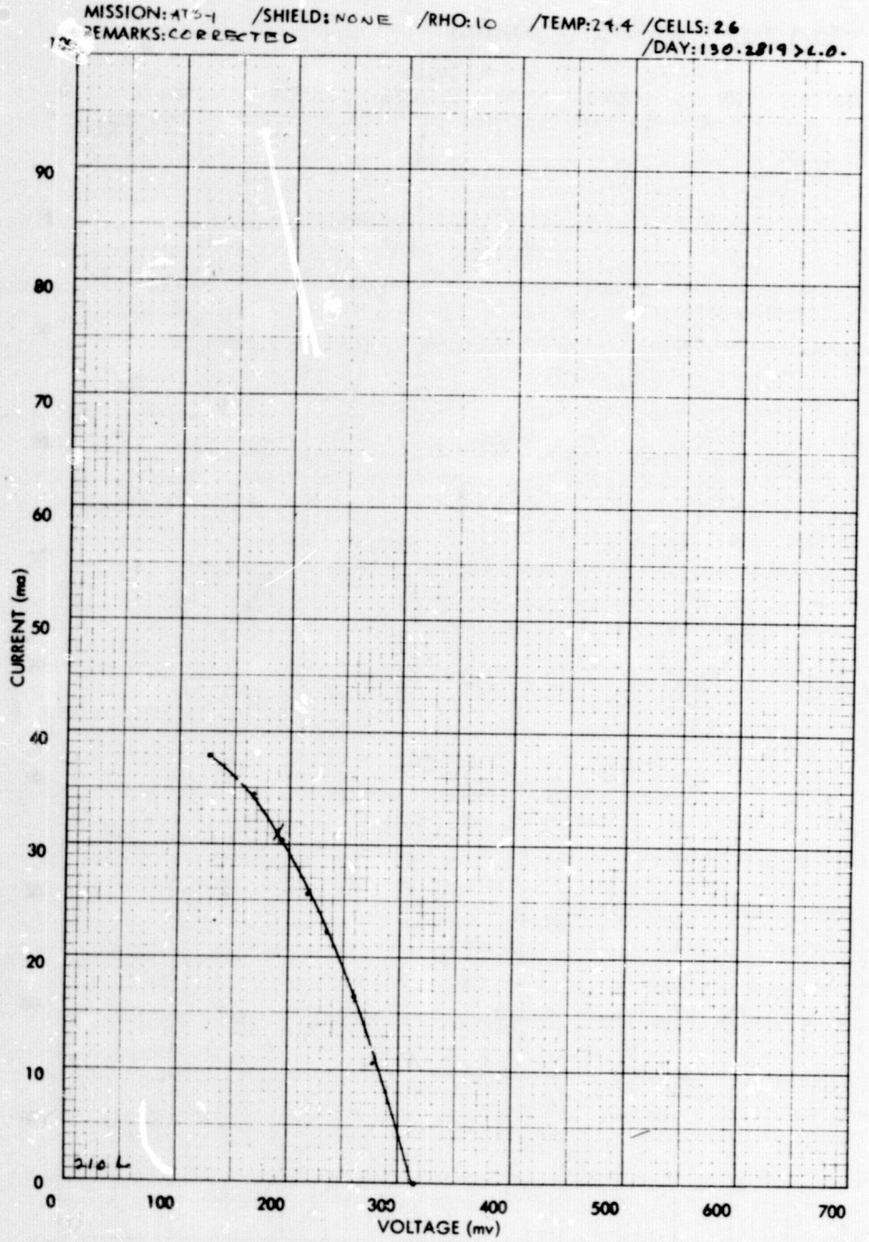


Figure 209. Cell 26, Days 60.6 and 100.6. Corrected Data



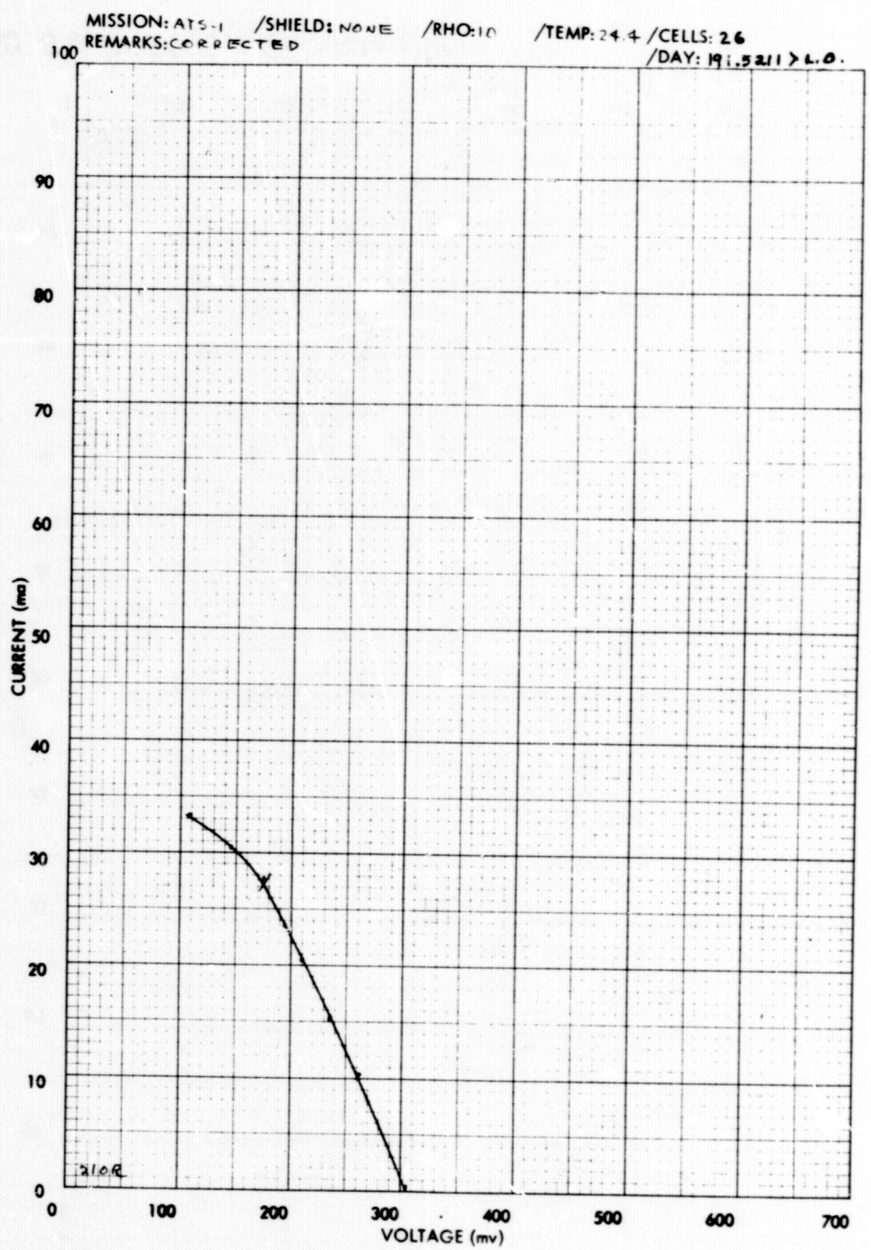
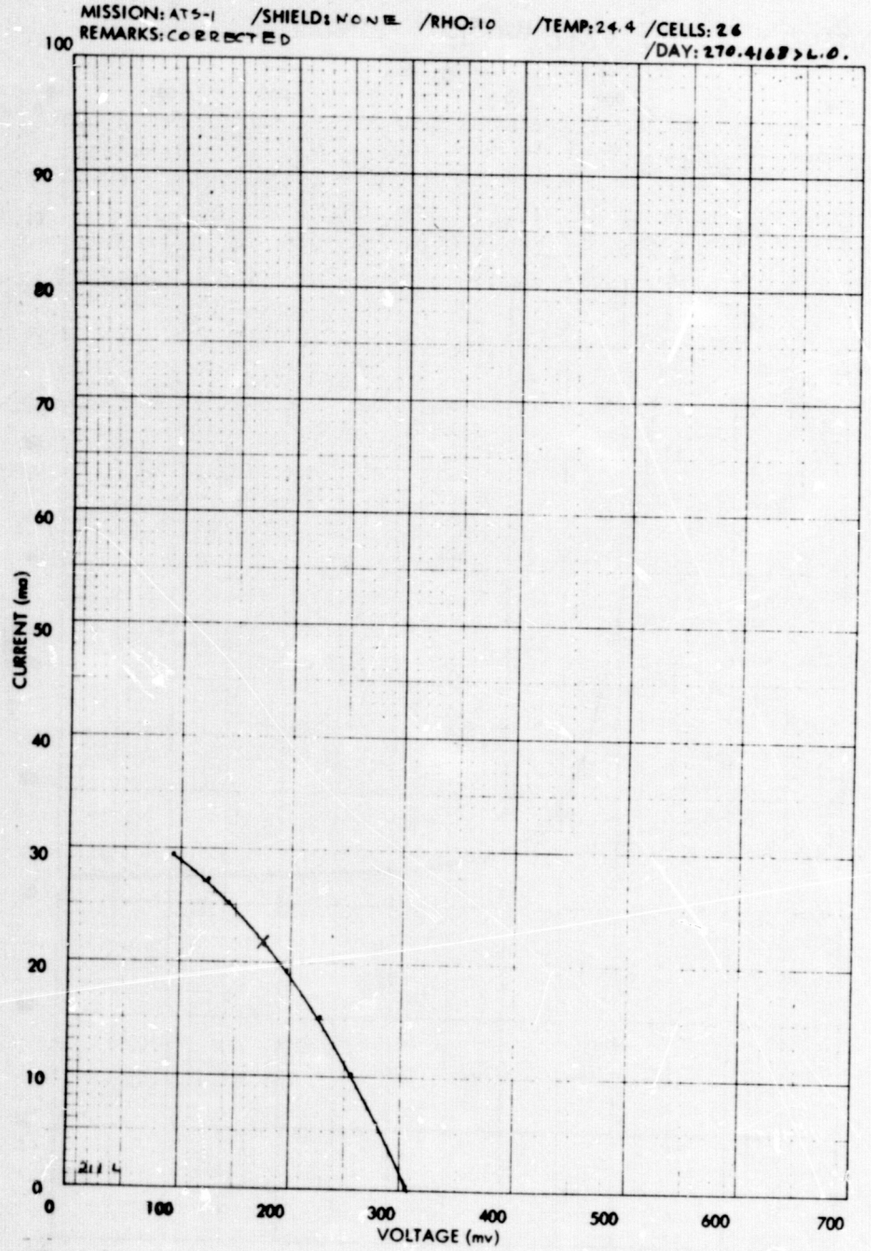


Figure 210. Cell 26, Days 130.2 and 191.5. Corrected Data



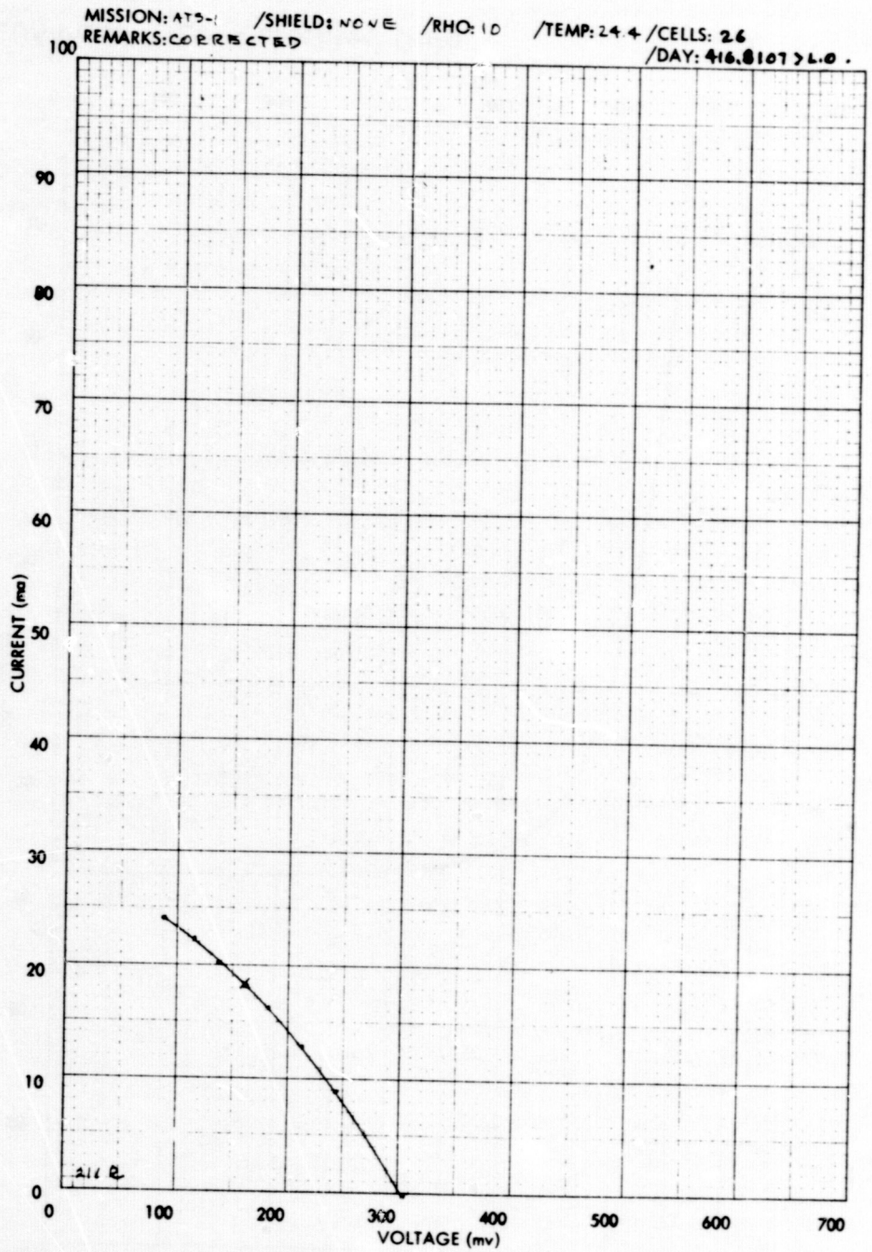
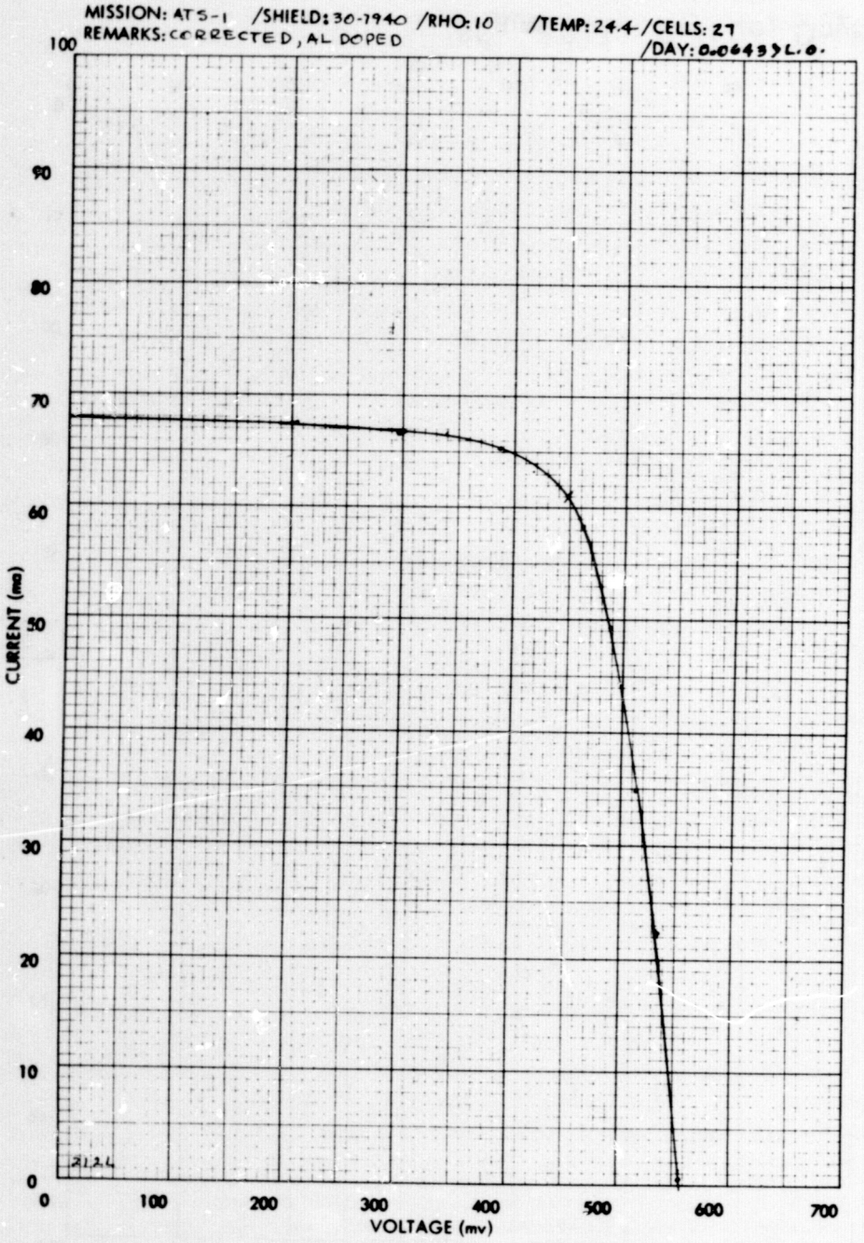


Figure 211. Cell 26, Days 270.4 and 416.8. Corrected Data



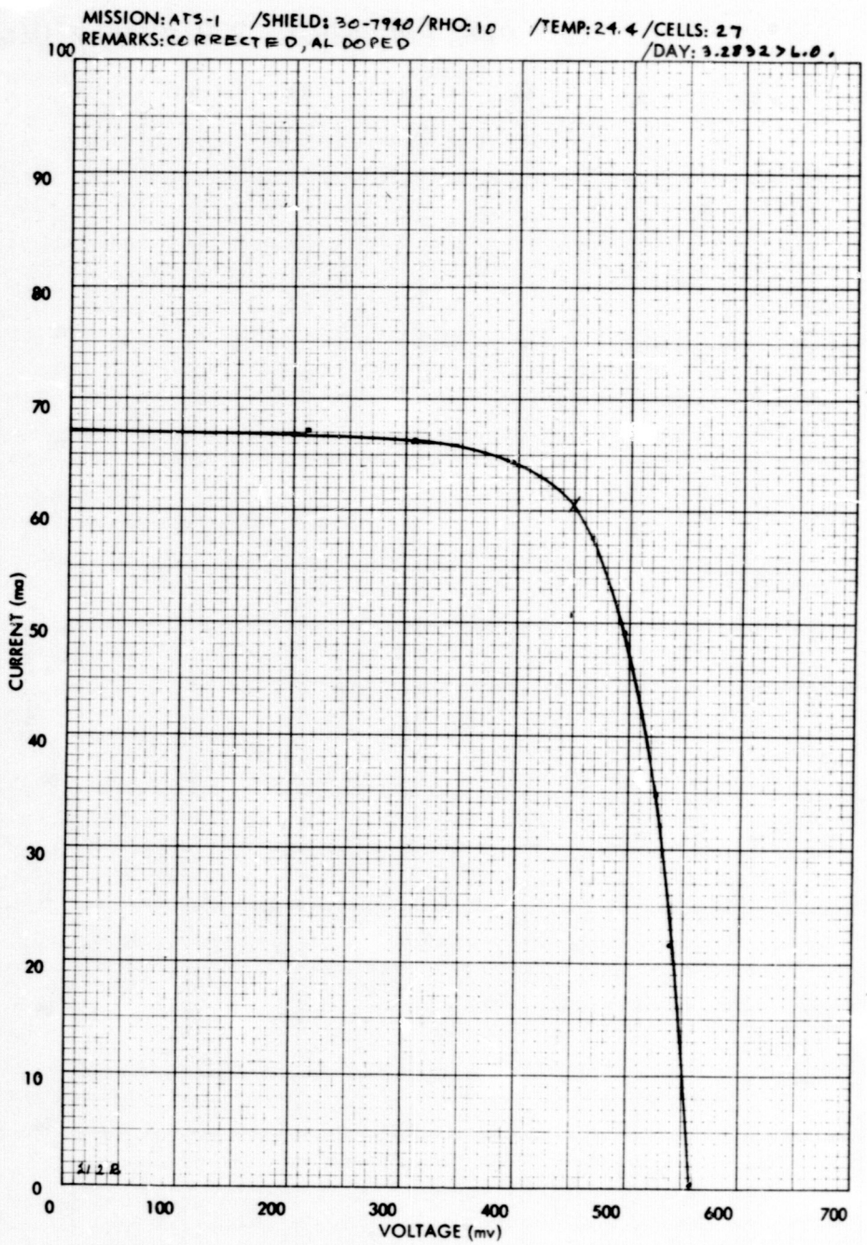


Figure 212. Cell 27, Days 0.064 and 3.2. Corrected Data

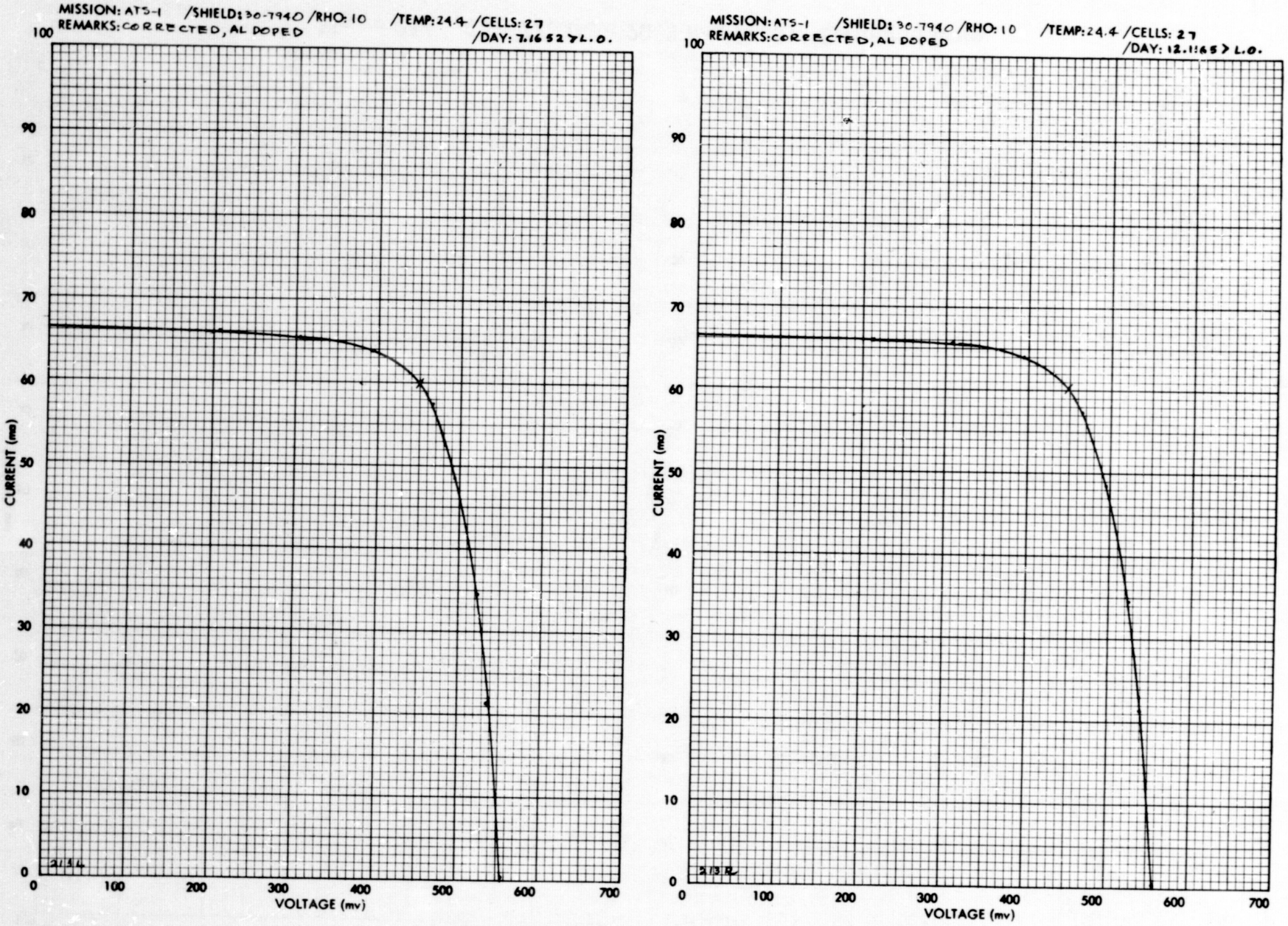
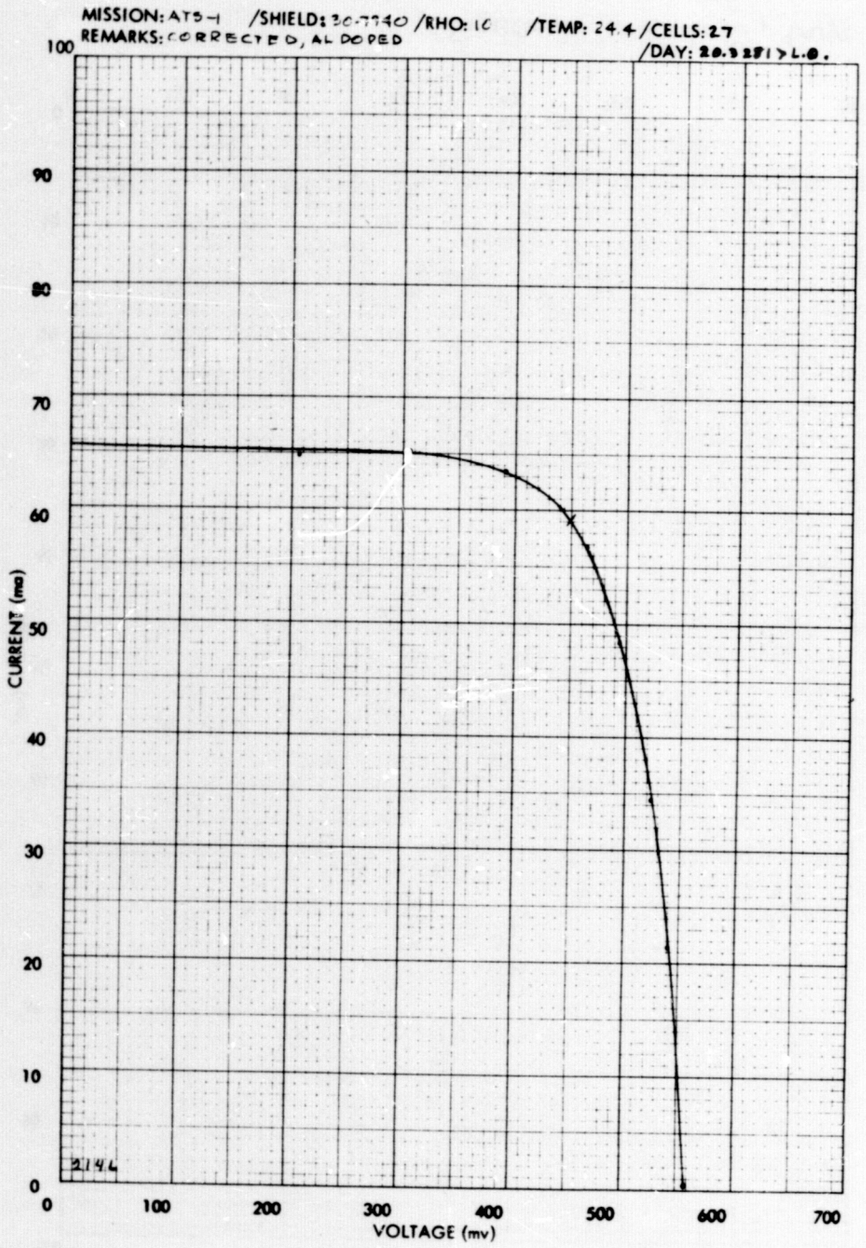


Figure 213. Cell 27, Days 7.1 and 12.1. Corrected Data



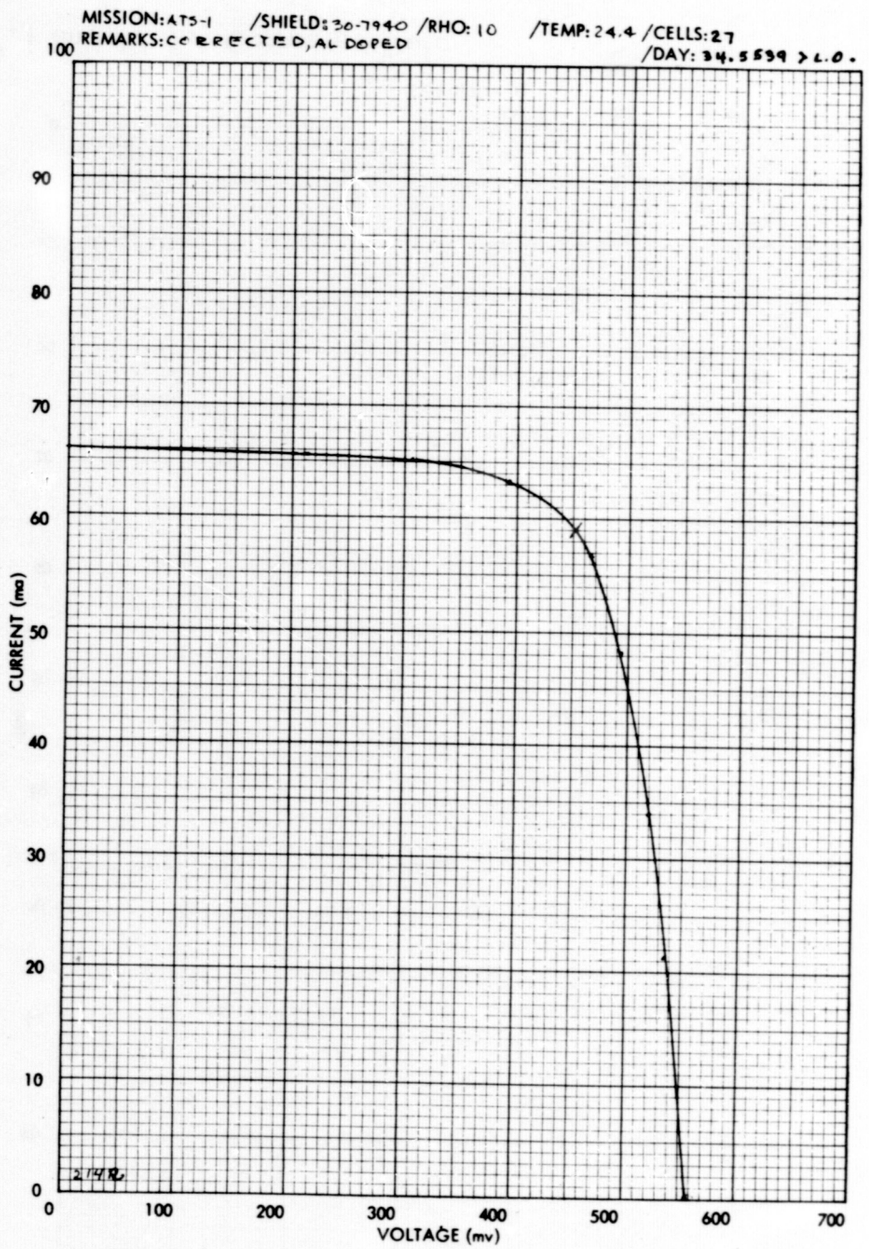
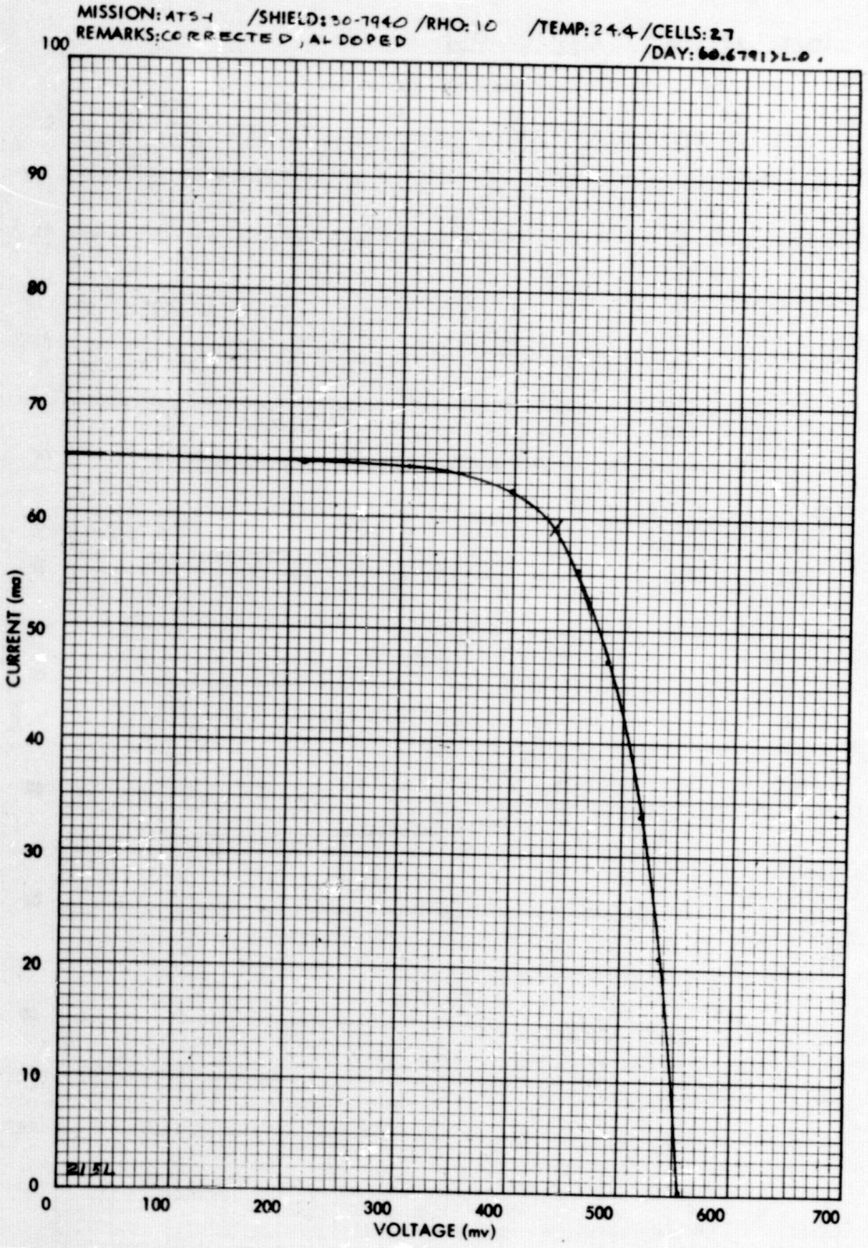


Figure 214. Cell 27, Days 20.3 and 34.5. Corrected Data



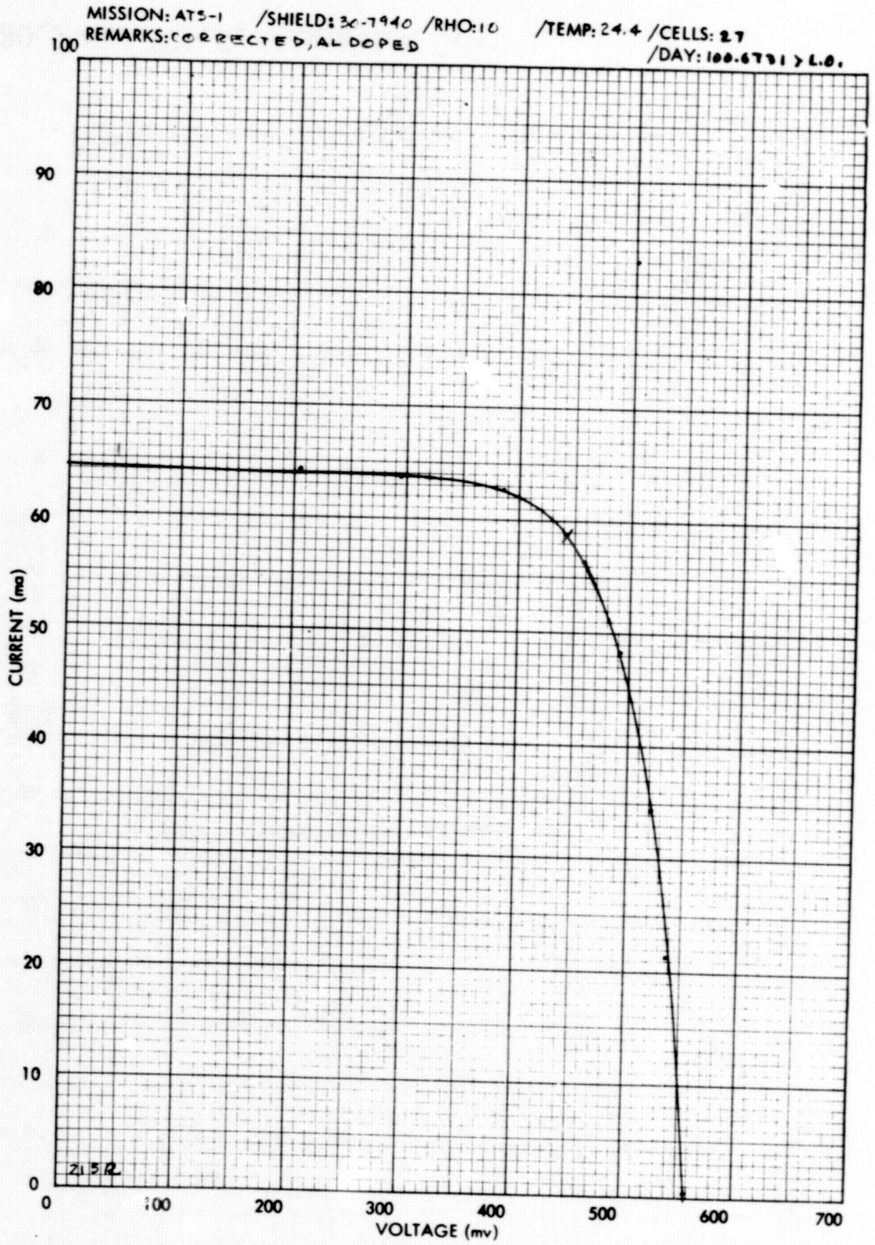


Figure 215. Cell 27, Days 60.6 and 100.6. Corrected Data

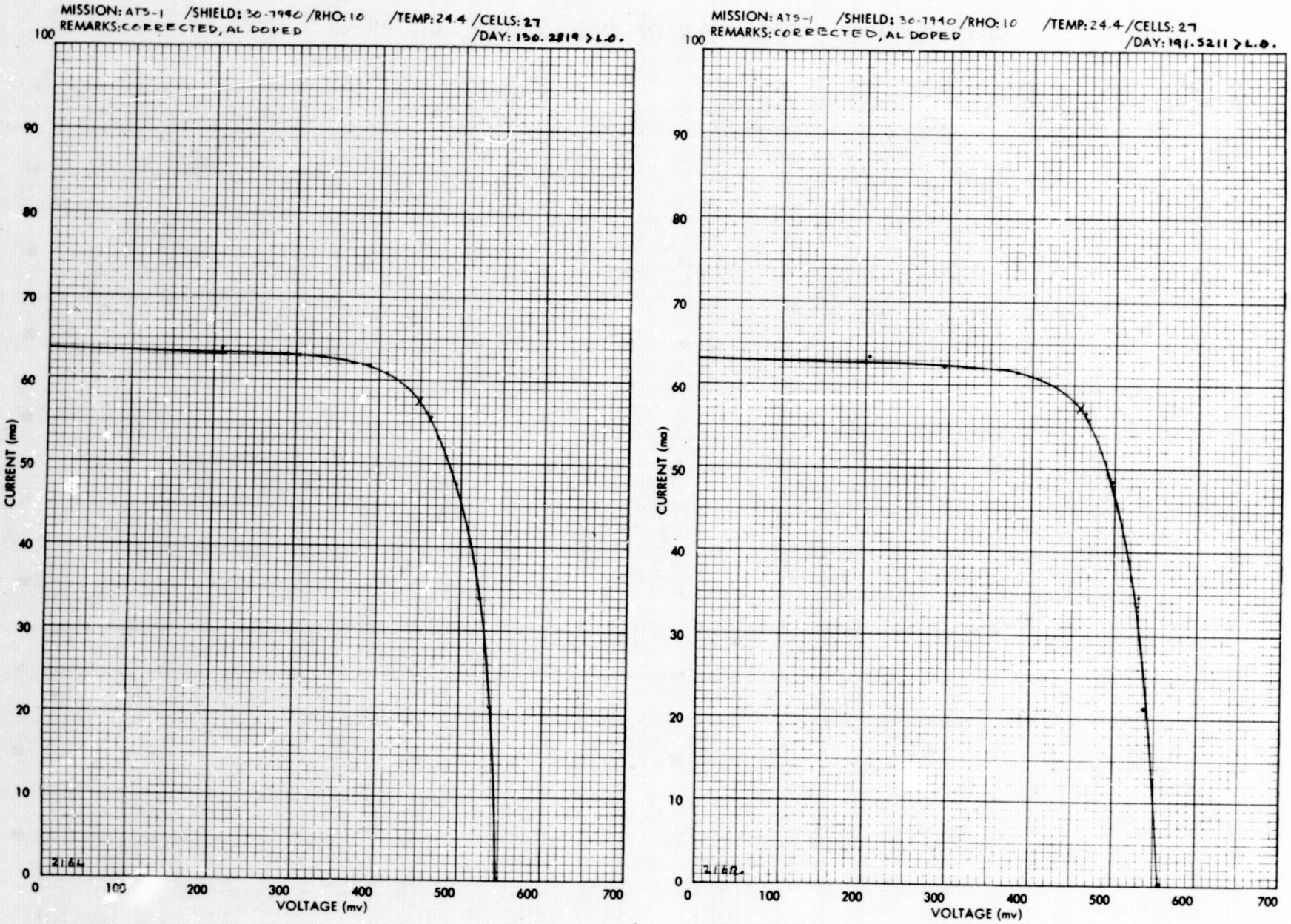
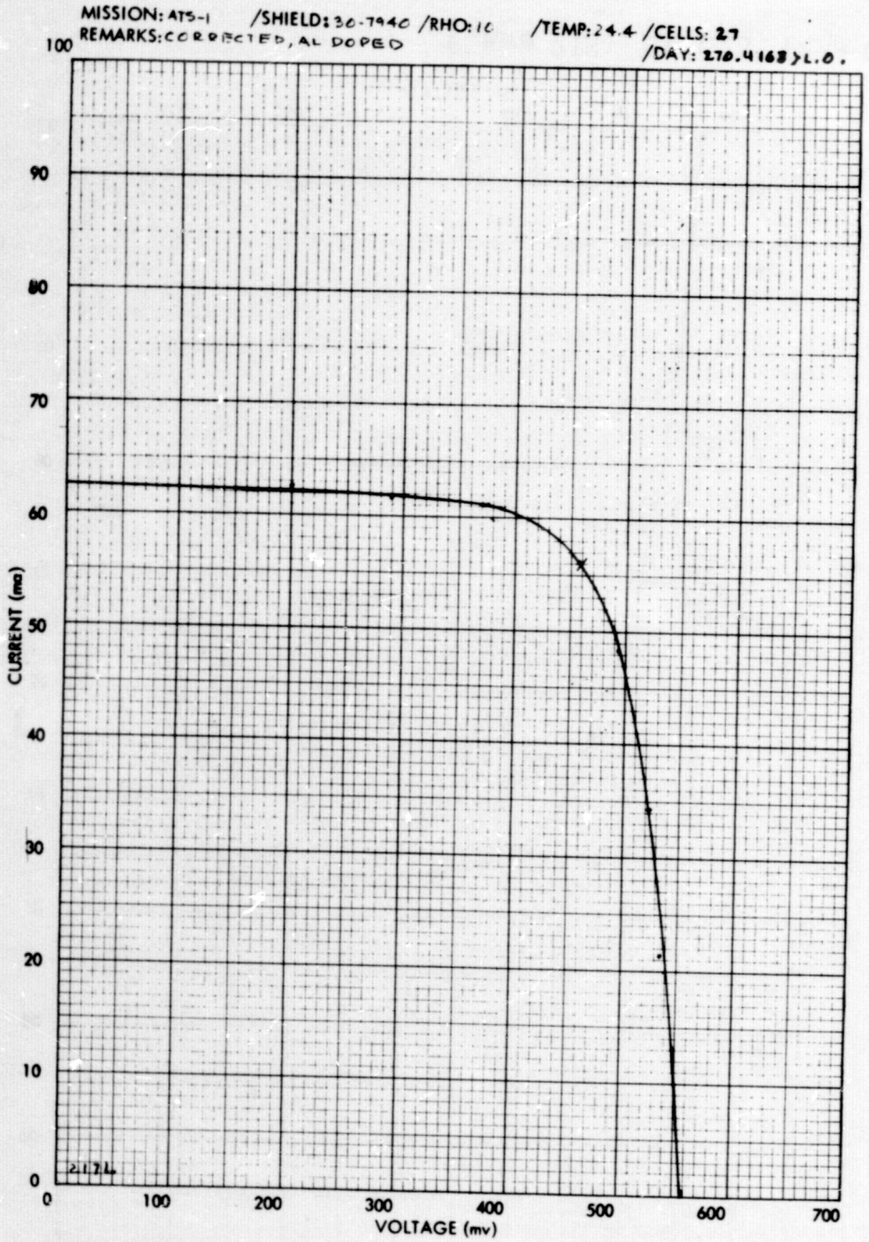


Figure 216. Cell 27, Days 130.2 and 191.5. Corrected Data



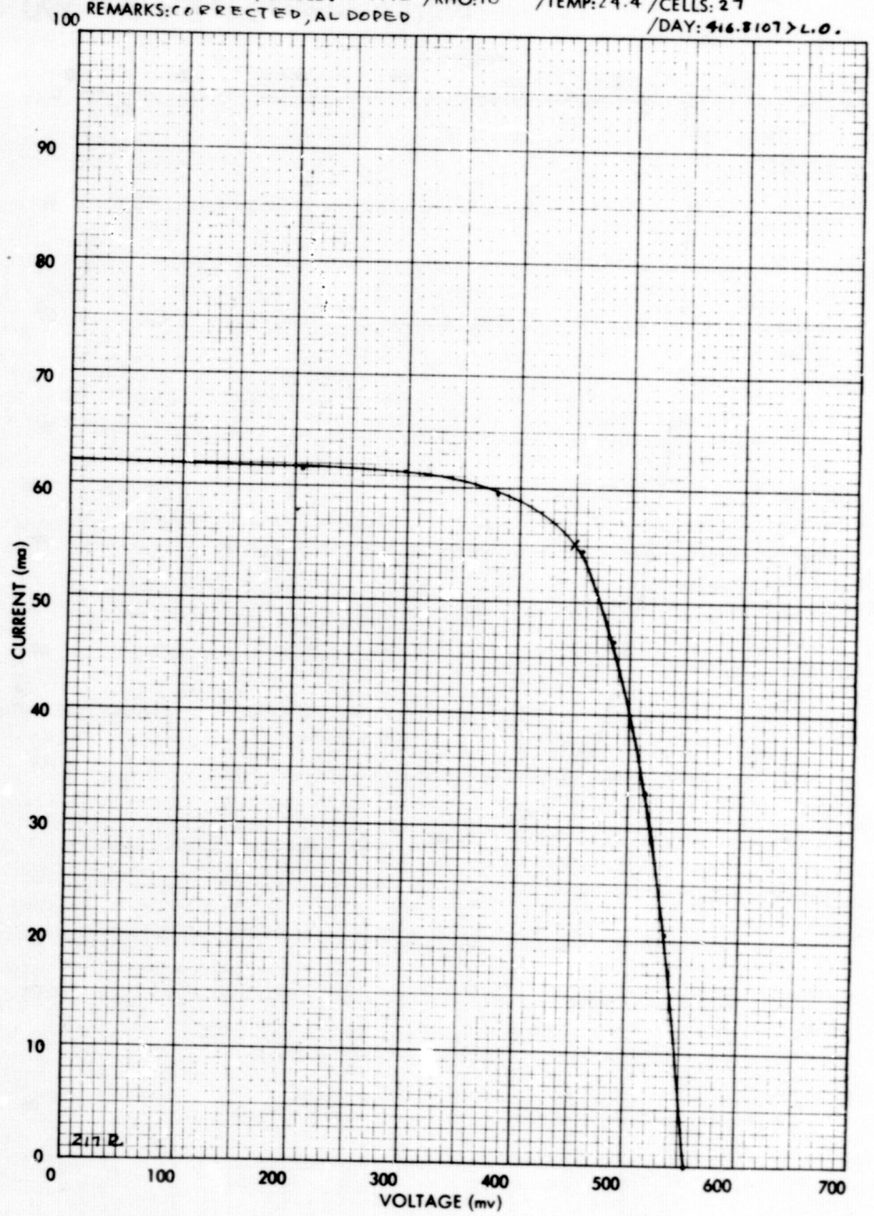
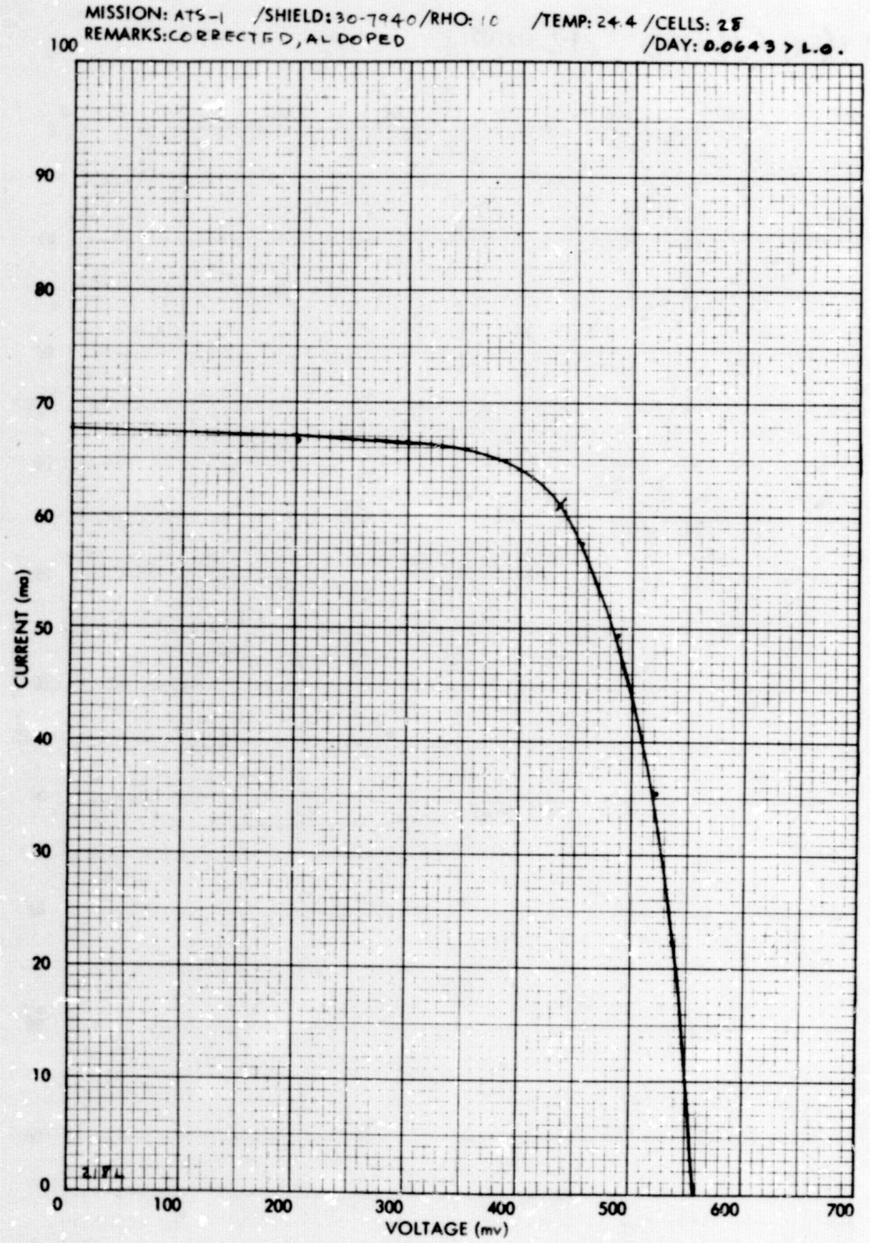


Figure 217. Cell 27, Days 270.4 and 416.8. Corrected Data



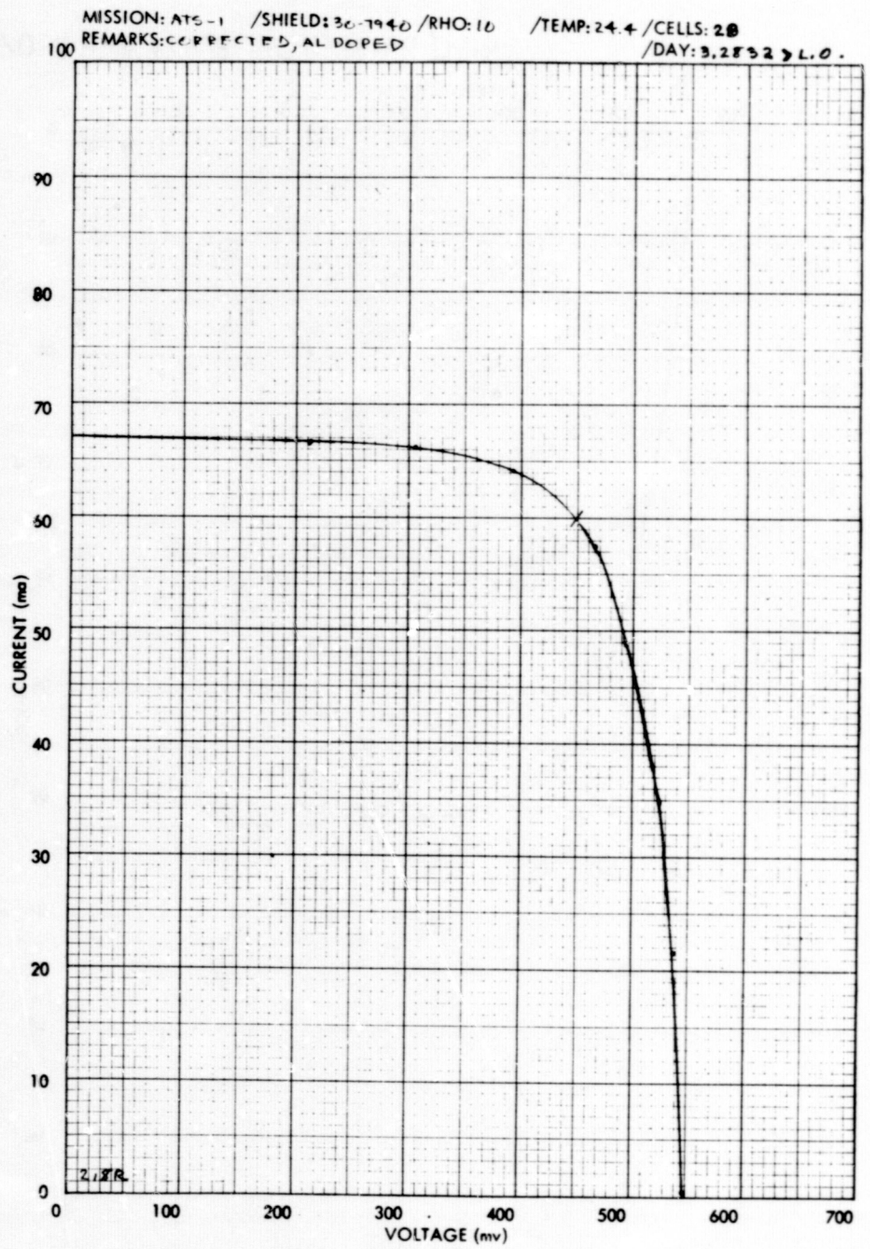


Figure 218. Cell 28, Days 0.064 and 3.2. Corrected Data

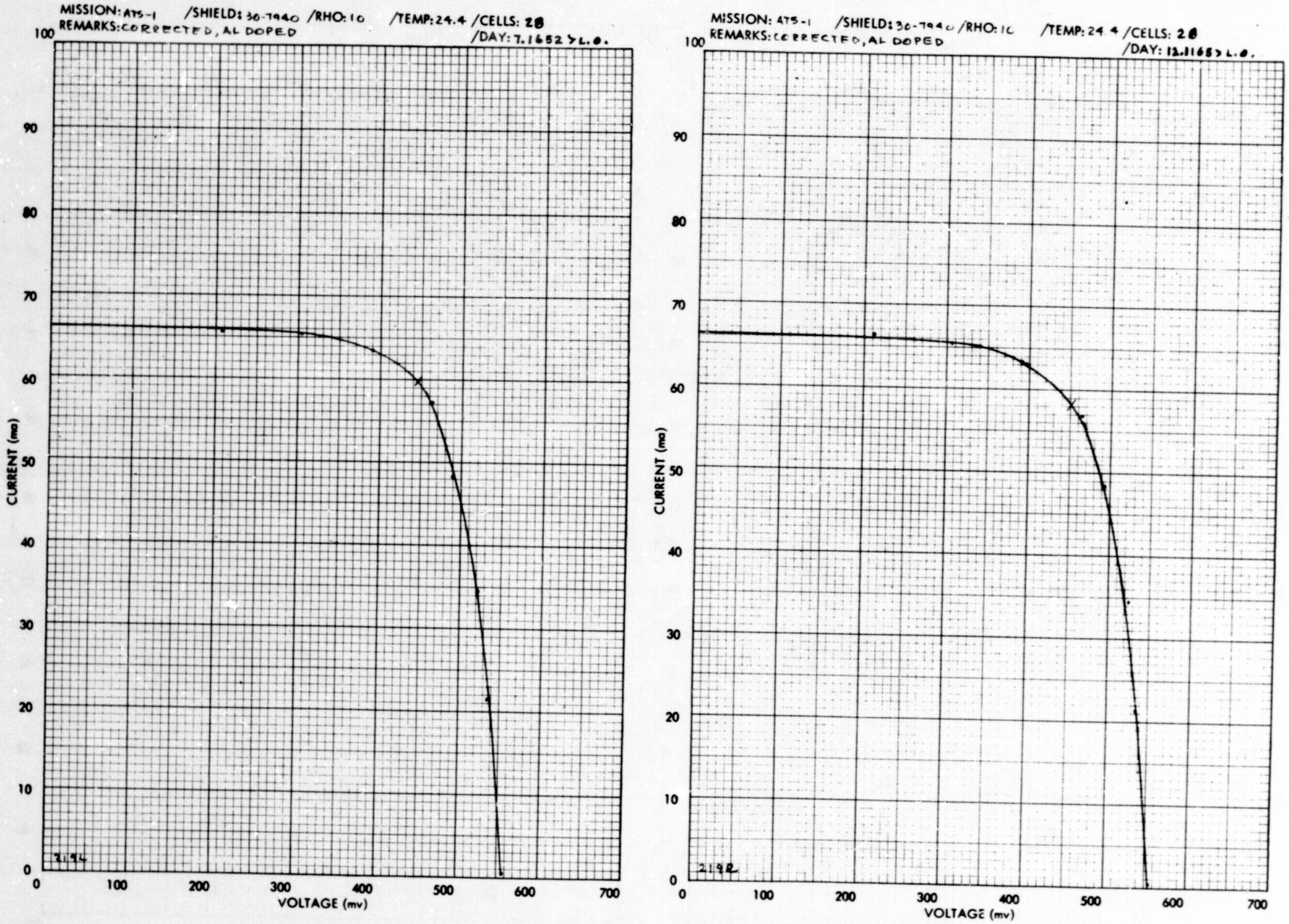


Figure 219. Cell 28, Days 7.1 and 12.1. Corrected Data

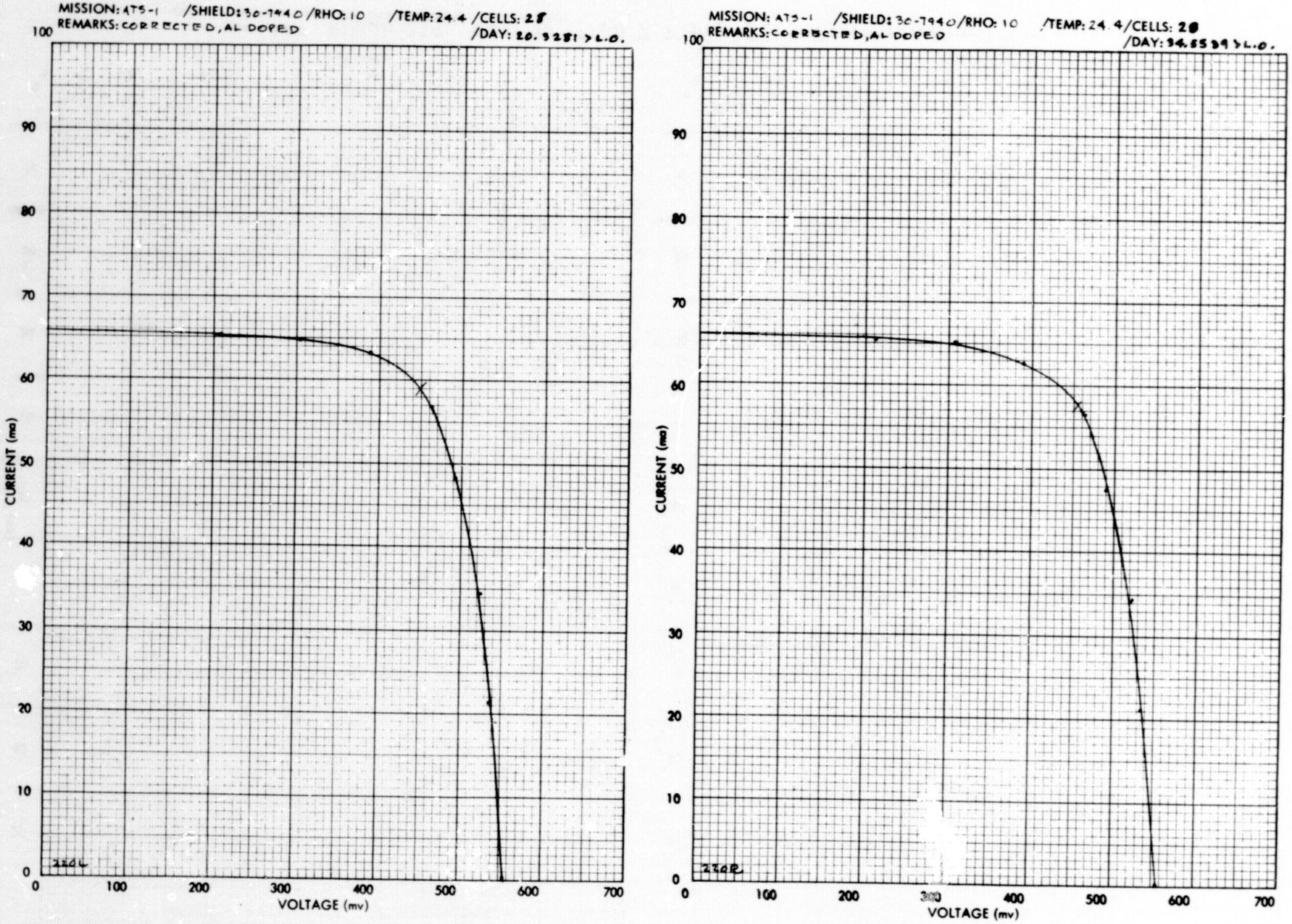
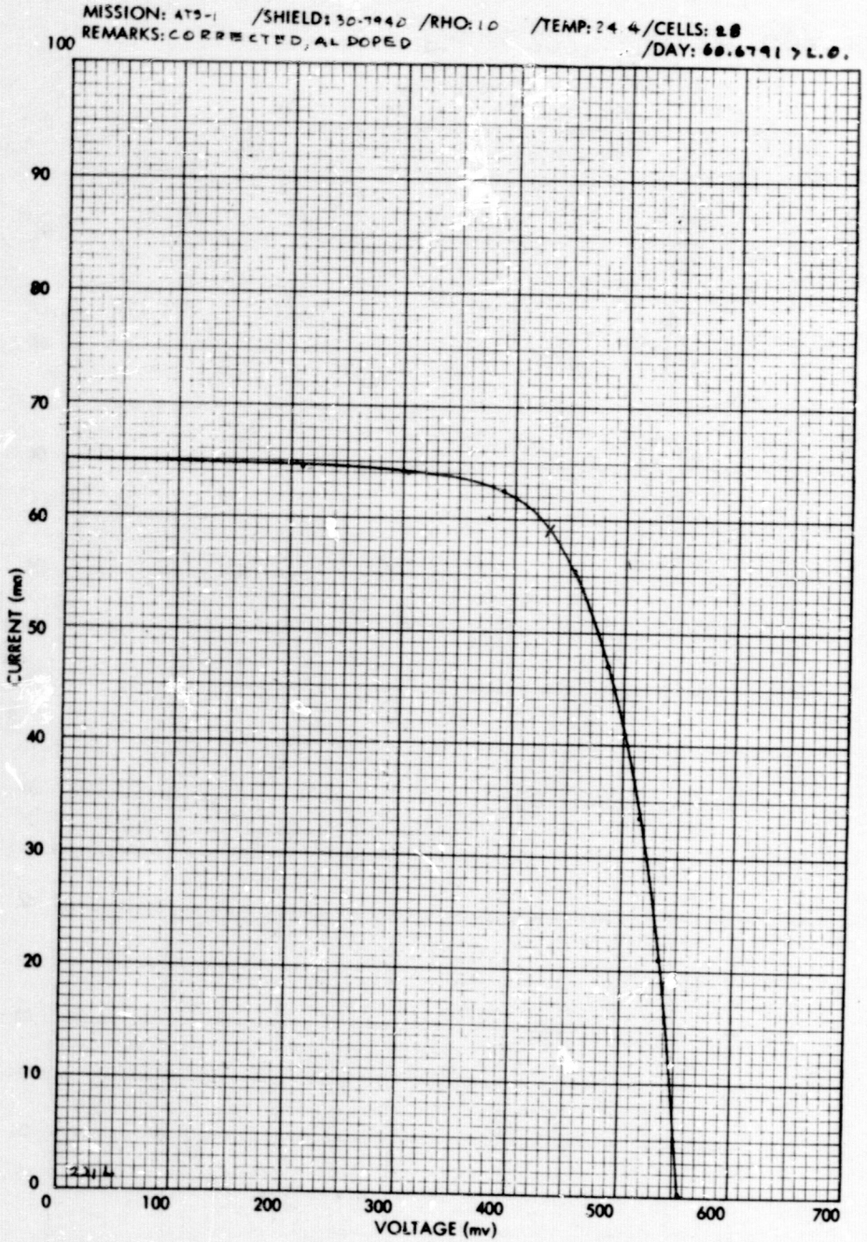


Figure 220. Cell 28, Days 20.3 and 34.5. Corrected Data



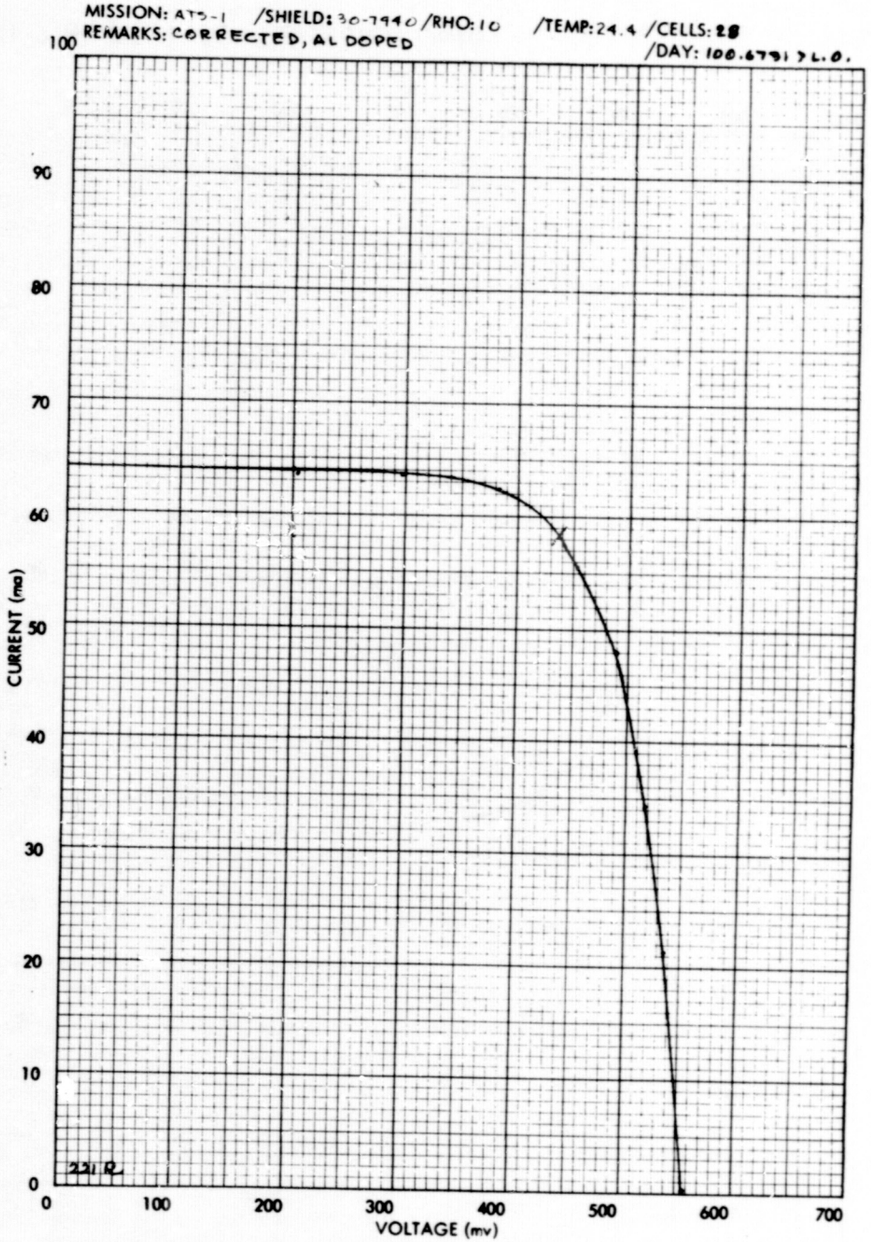
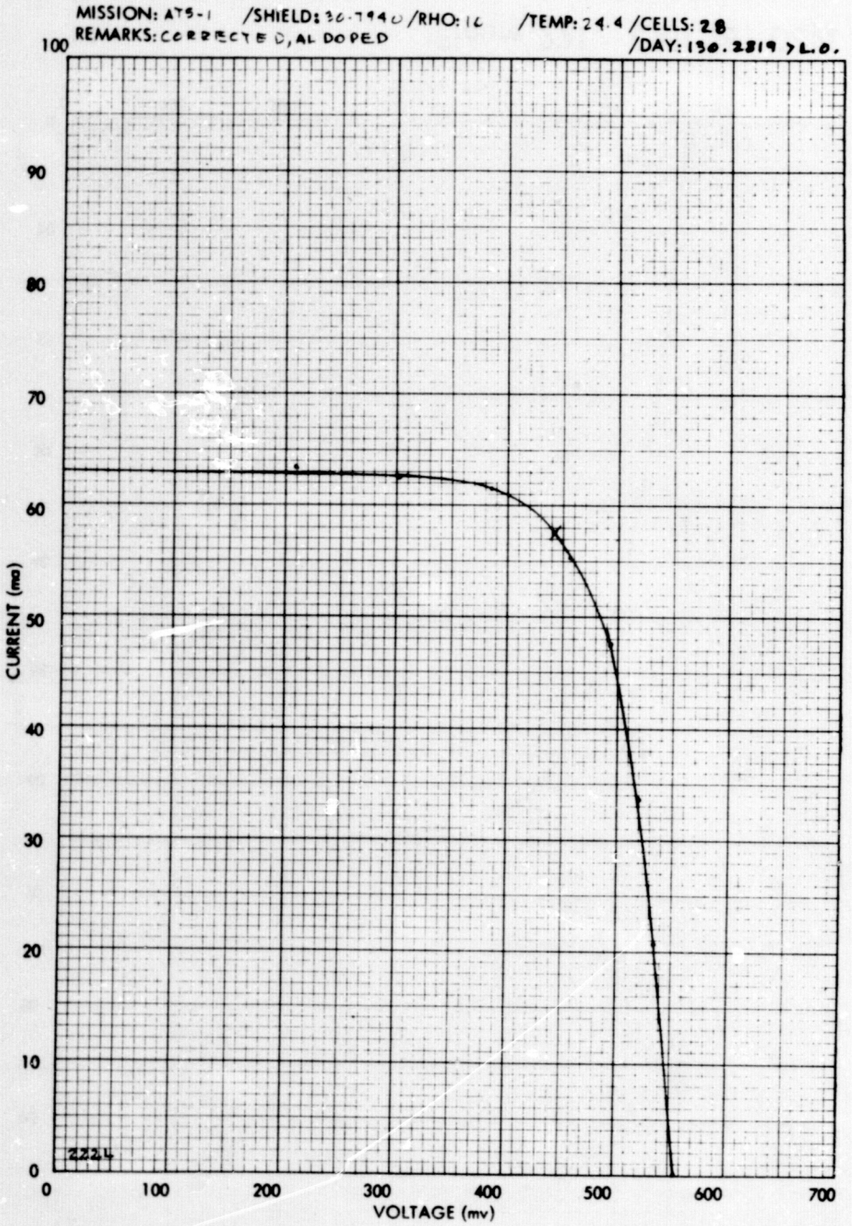


Figure 221. Cell 28, Days 60.6 and 100.6. Corrected Data



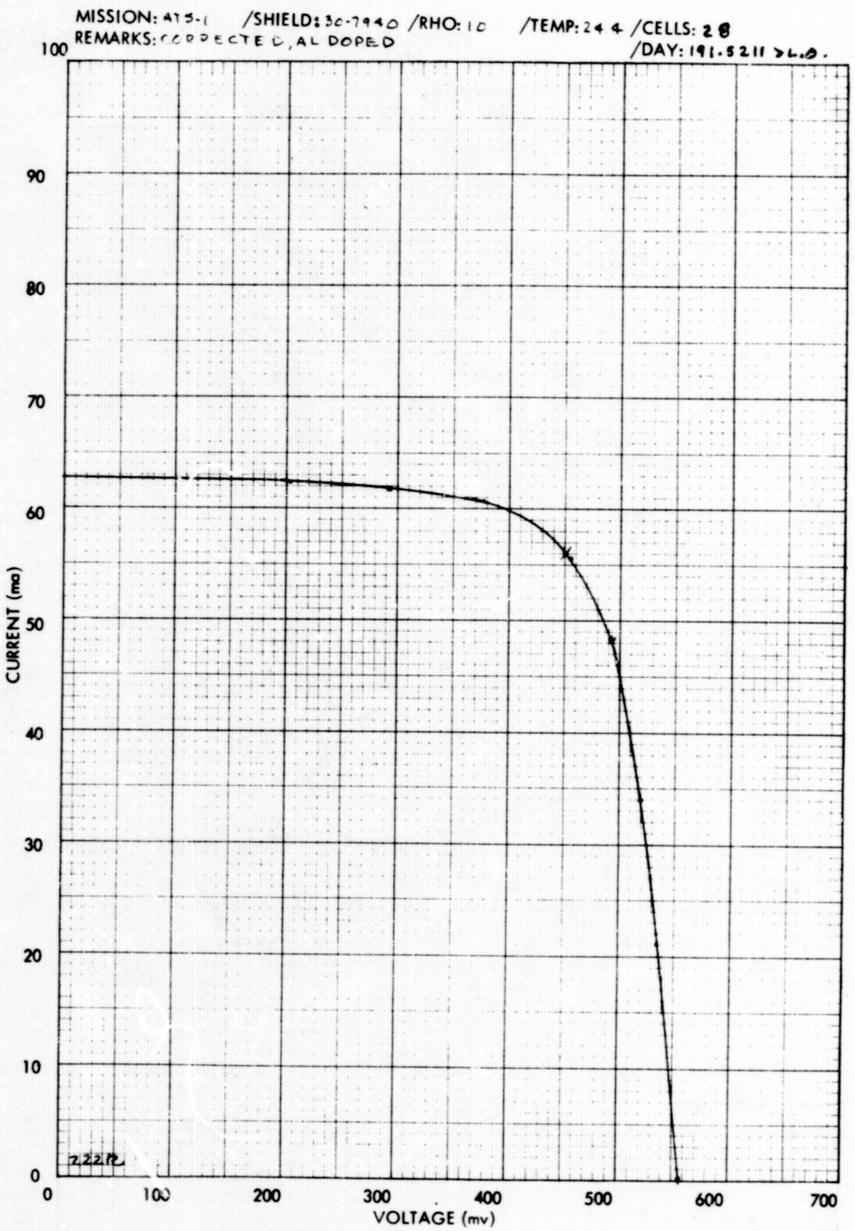
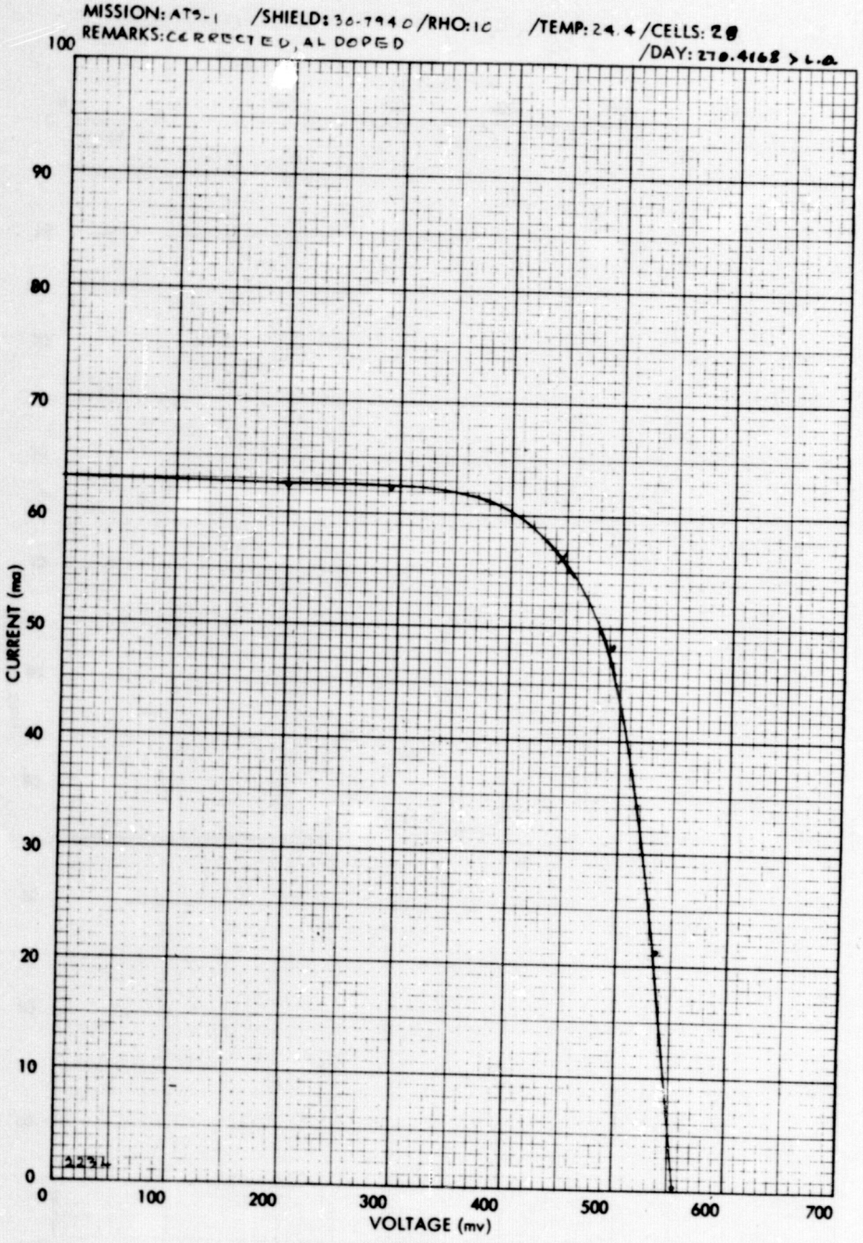


Figure 222. Cell 28, Days 130.2 and 191.5. Corrected Data



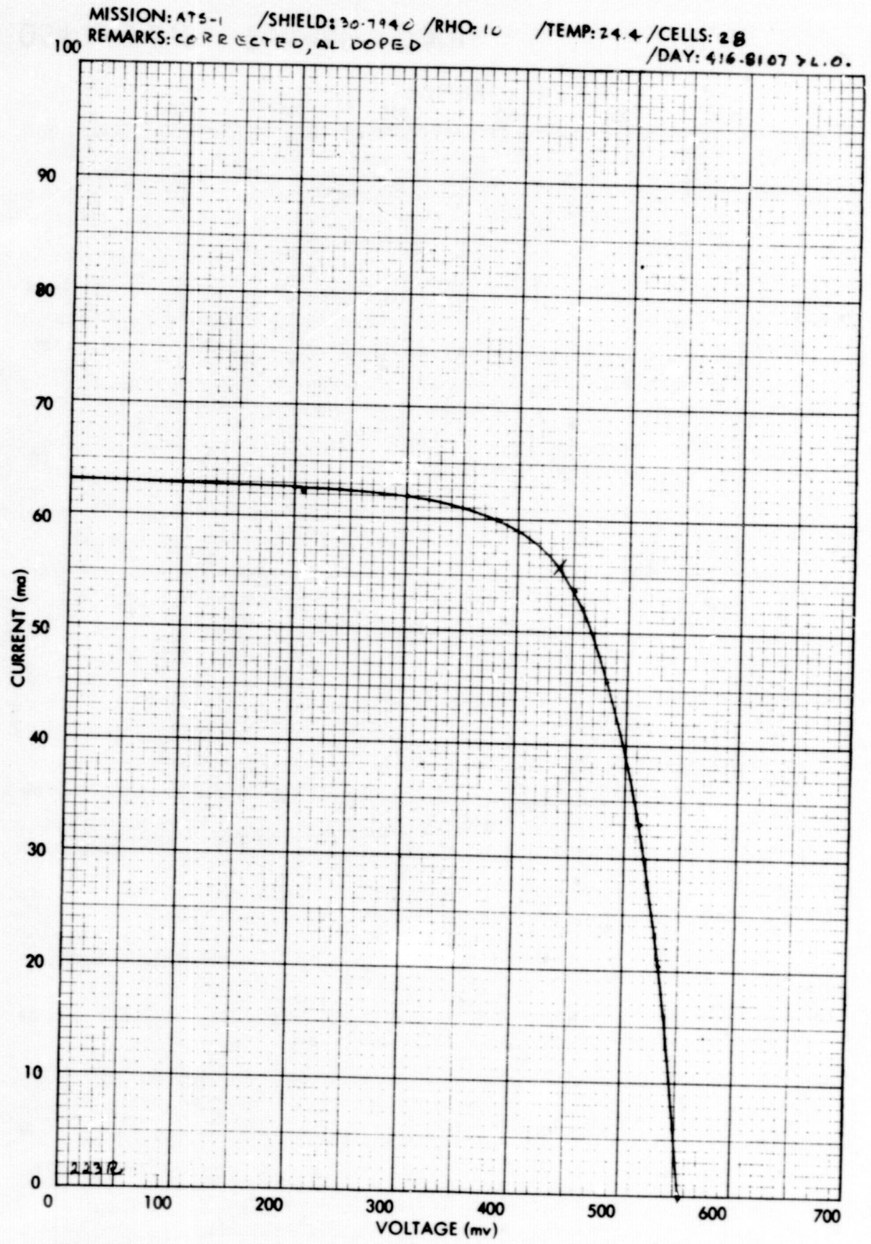
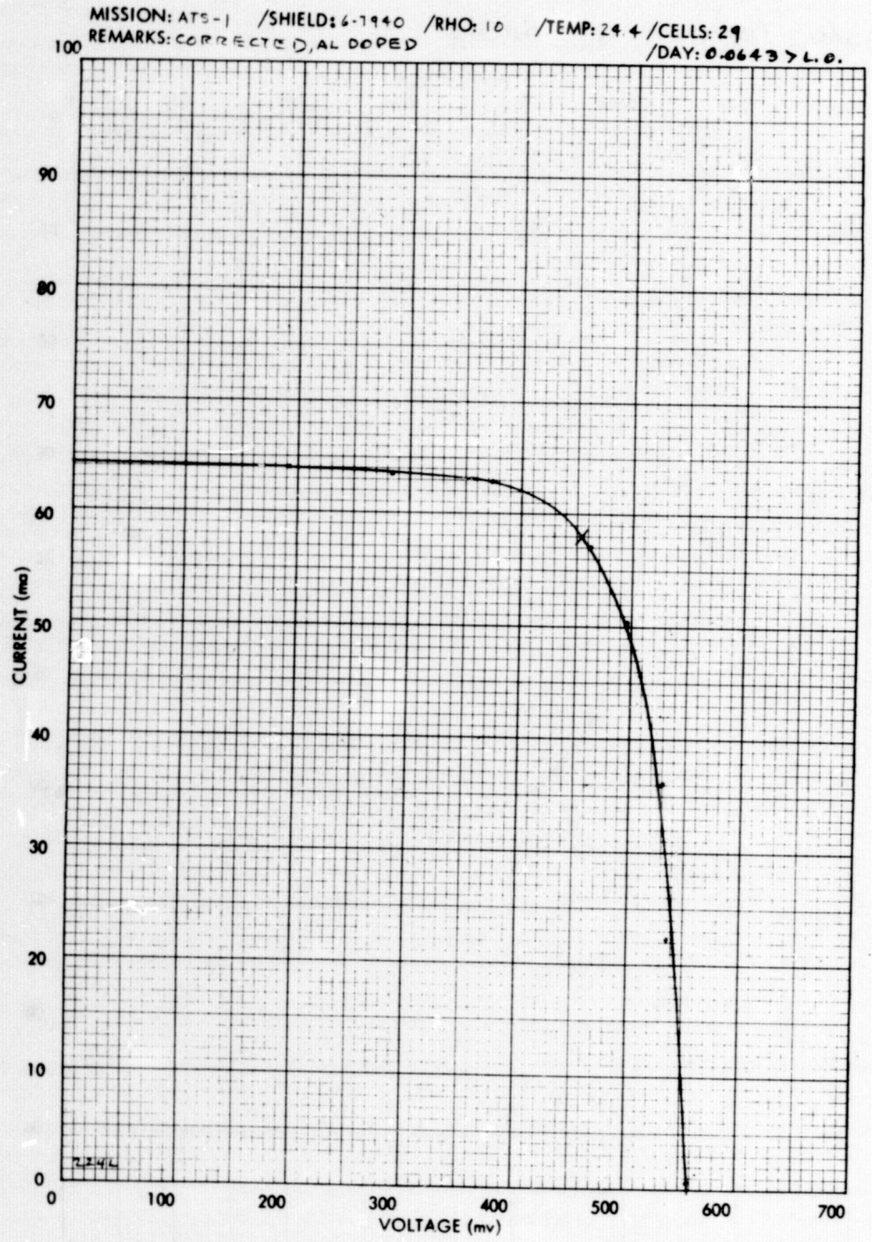


Figure 223. Cell 28, Days 270.4 and 416.8. Corrected Data



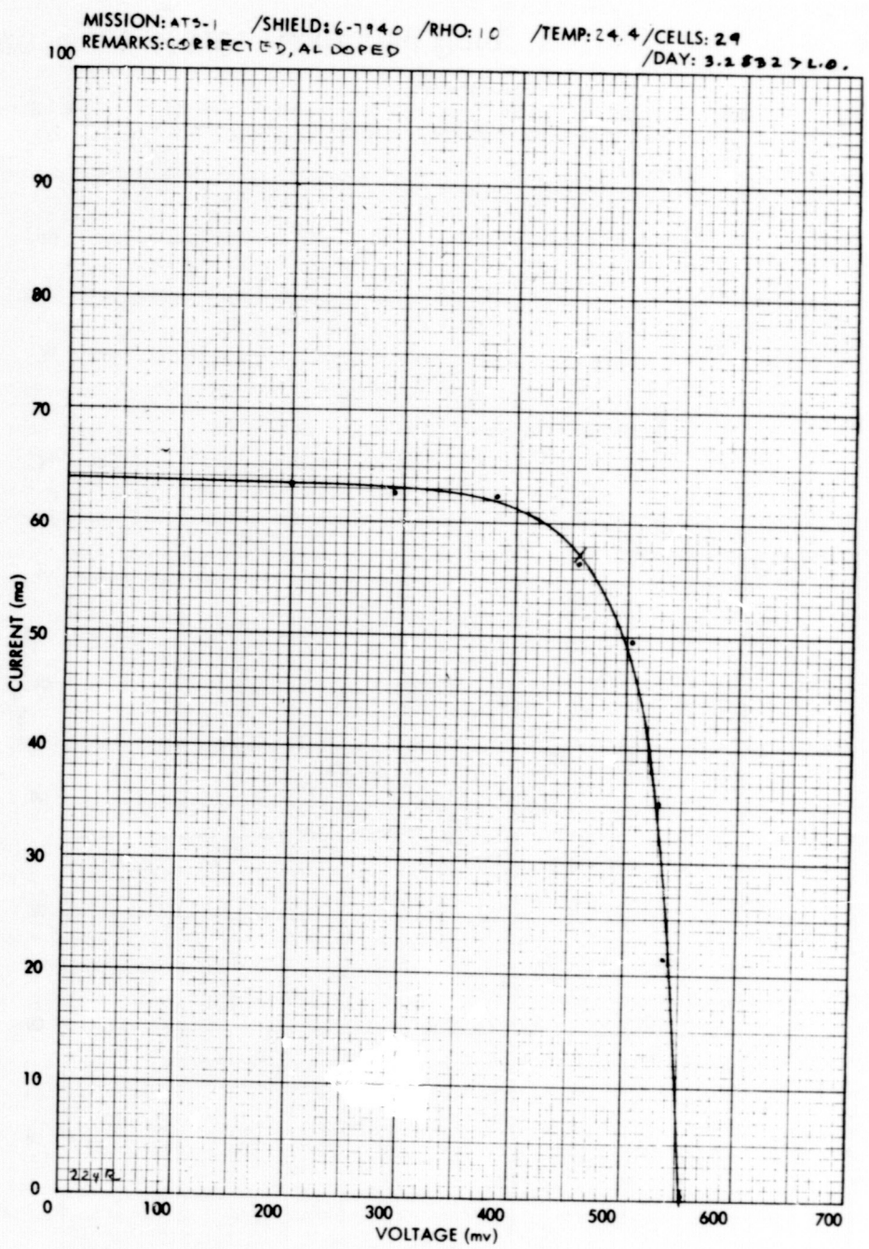
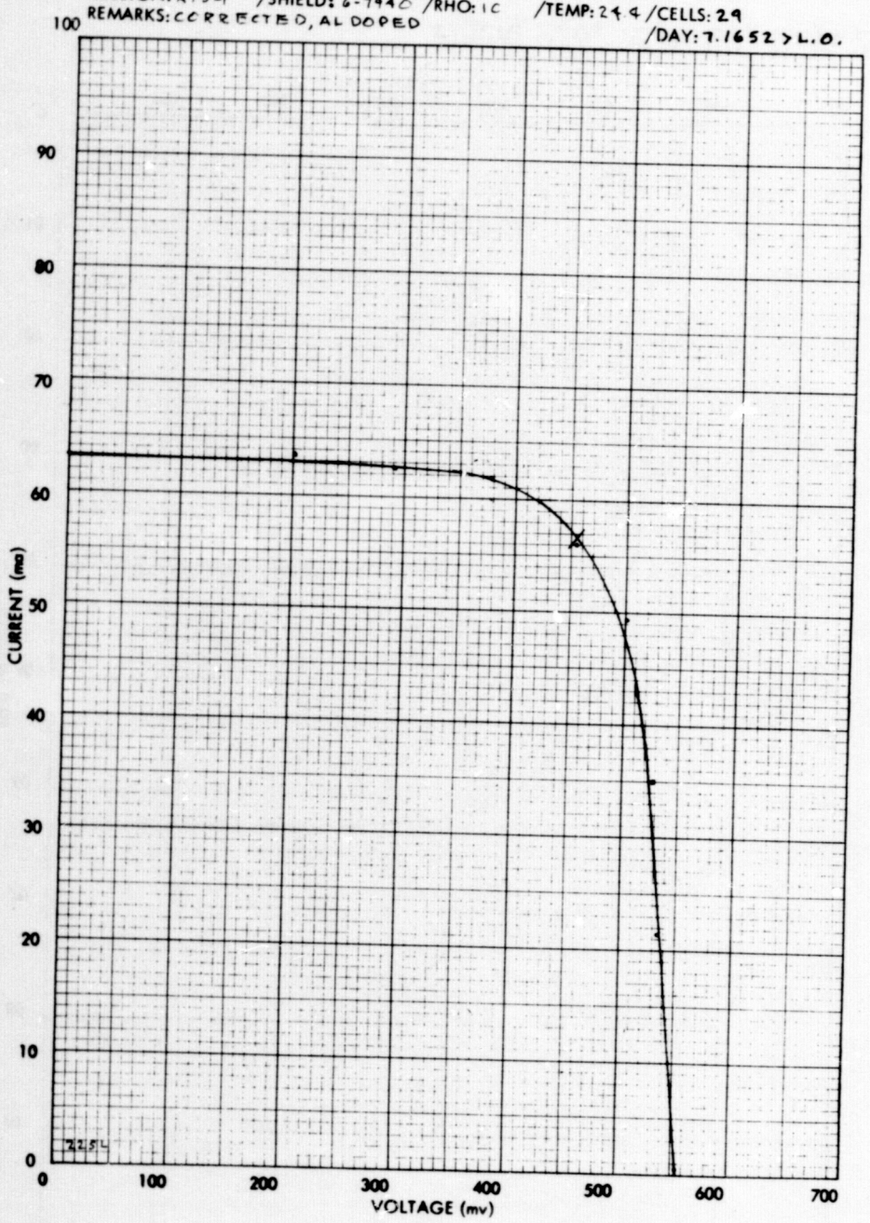


Figure 224. Cell 29, Days 0.064 and 3.2. Corrected Data



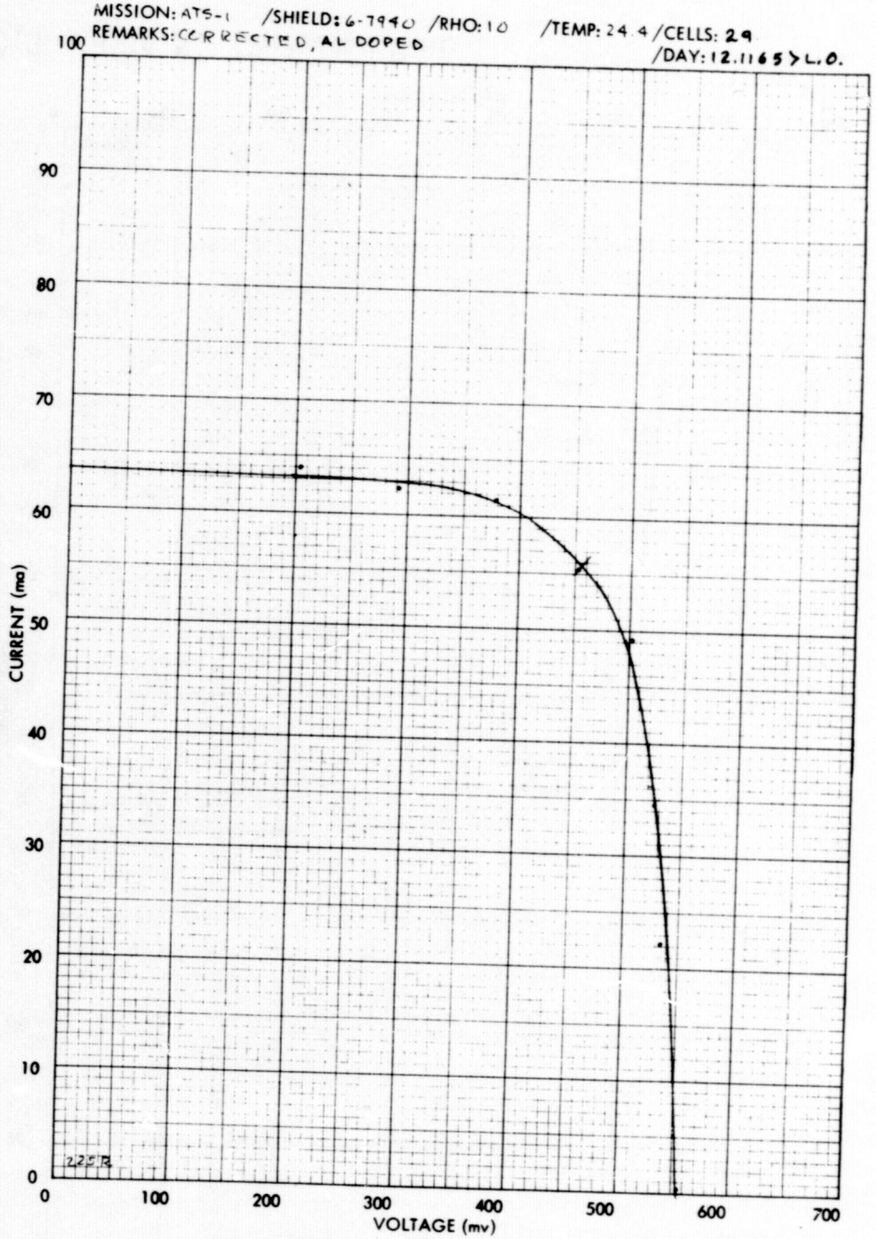
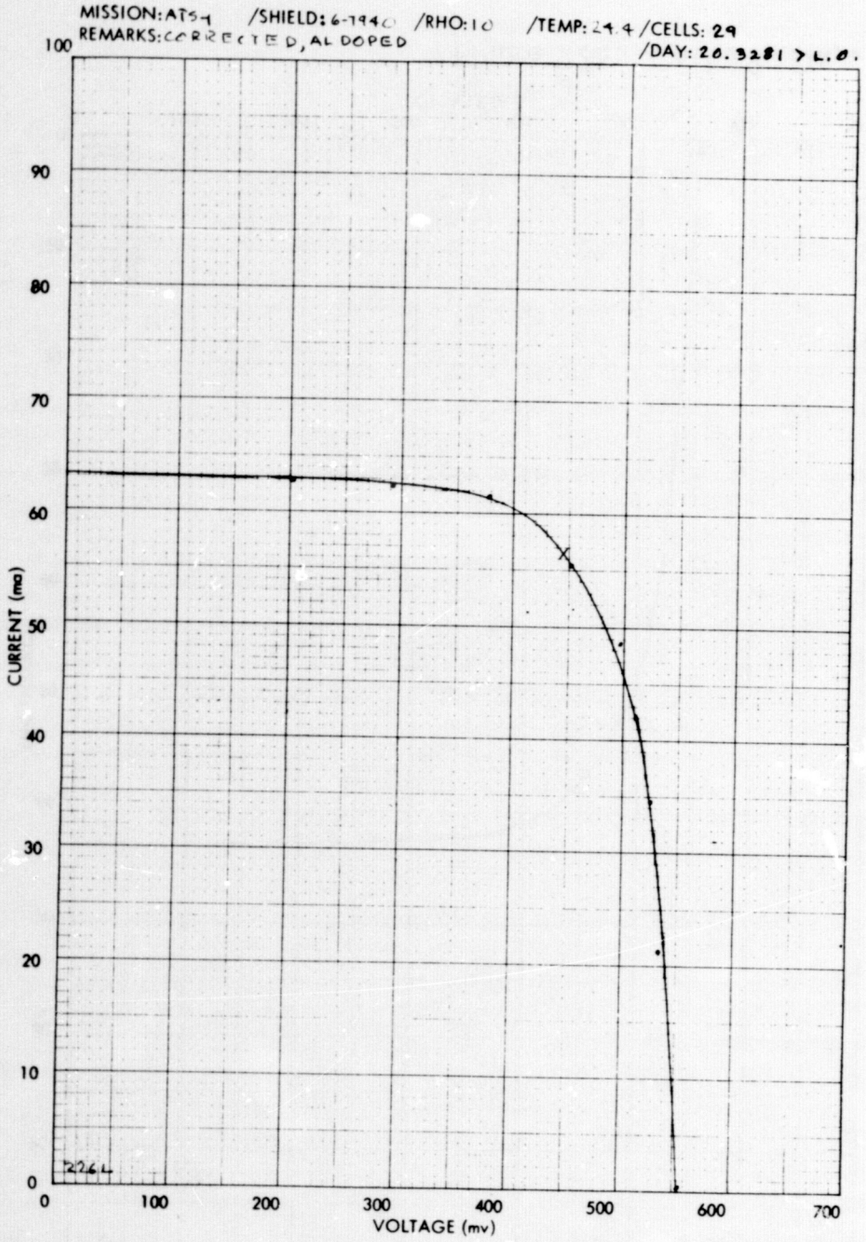


Figure 225. Cell 29, Days 7.1 and 12.1. Corrected Data



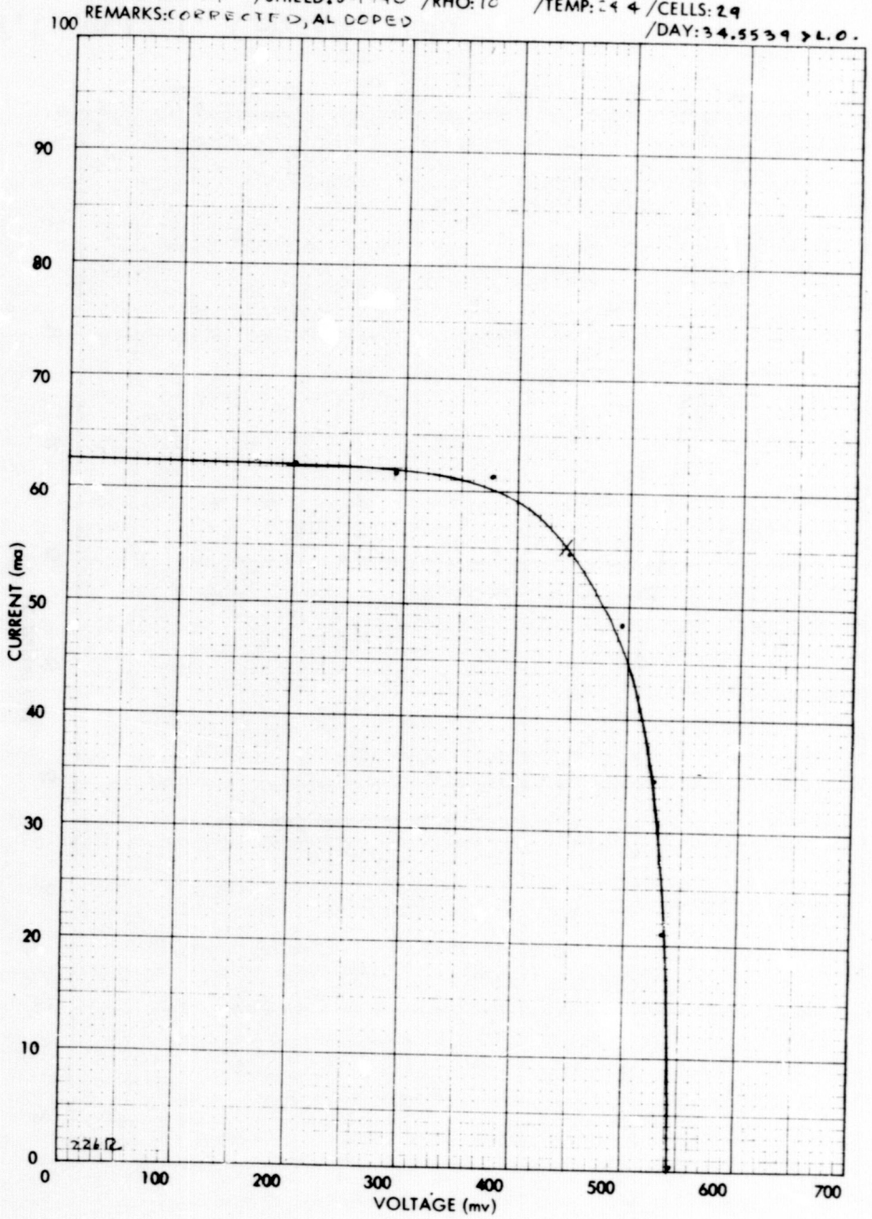
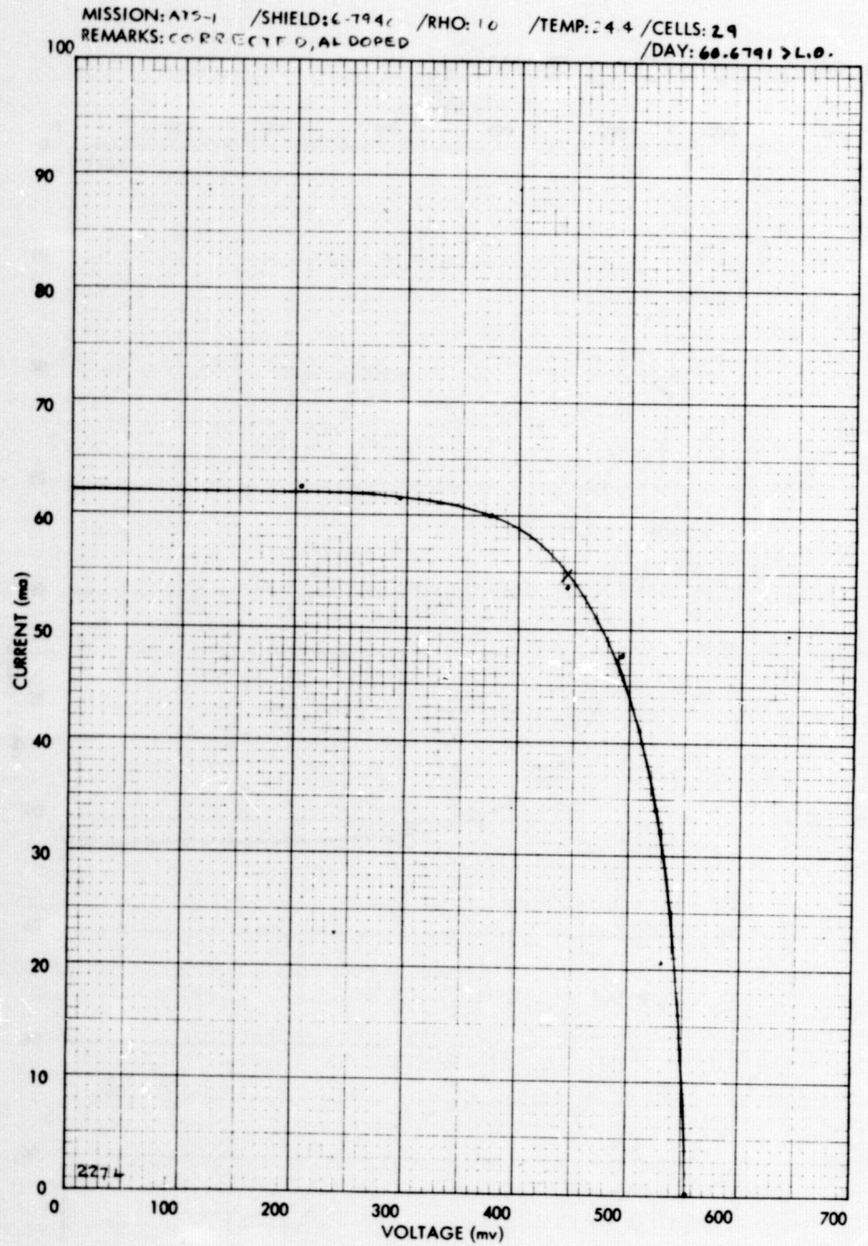


Figure 226. Cell 29, Days 20.3 and 34.5. Corrected Data



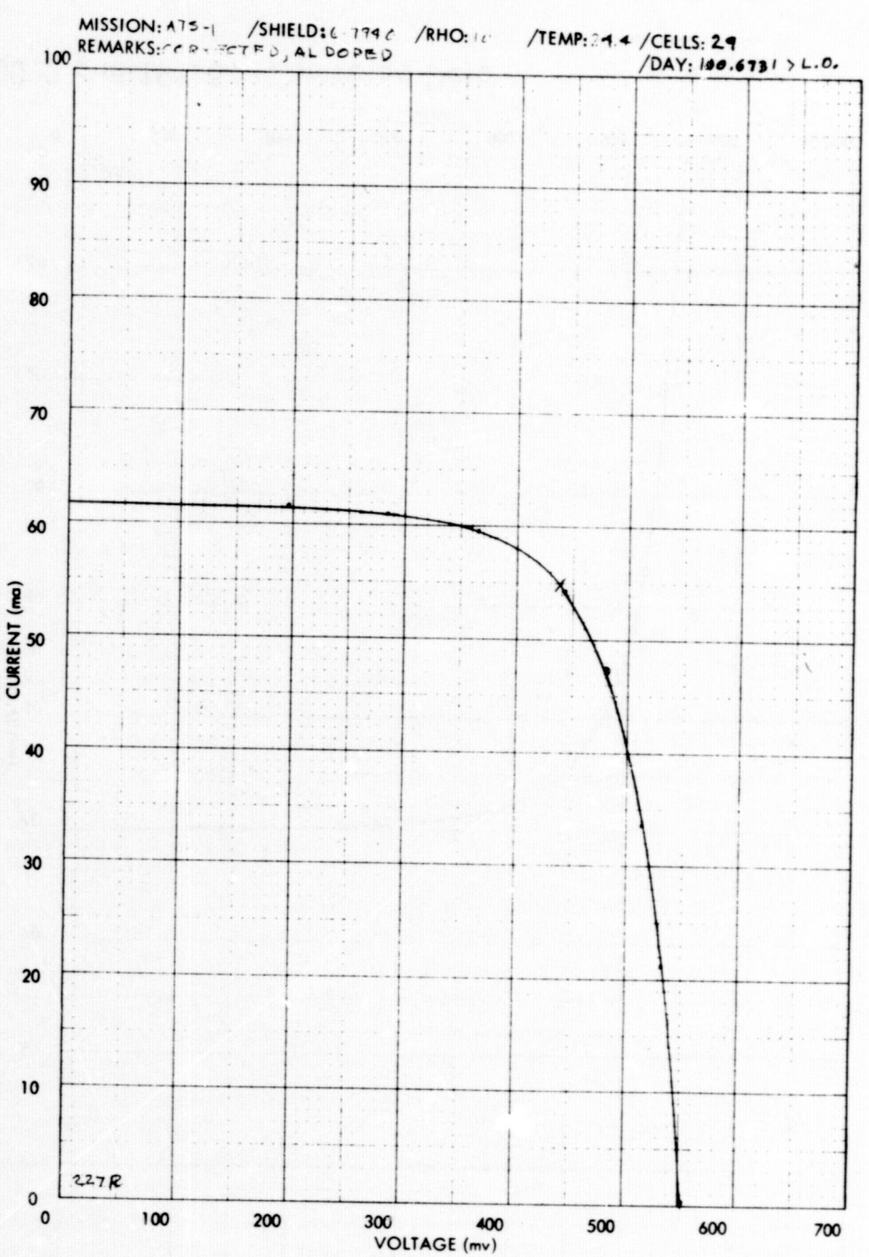
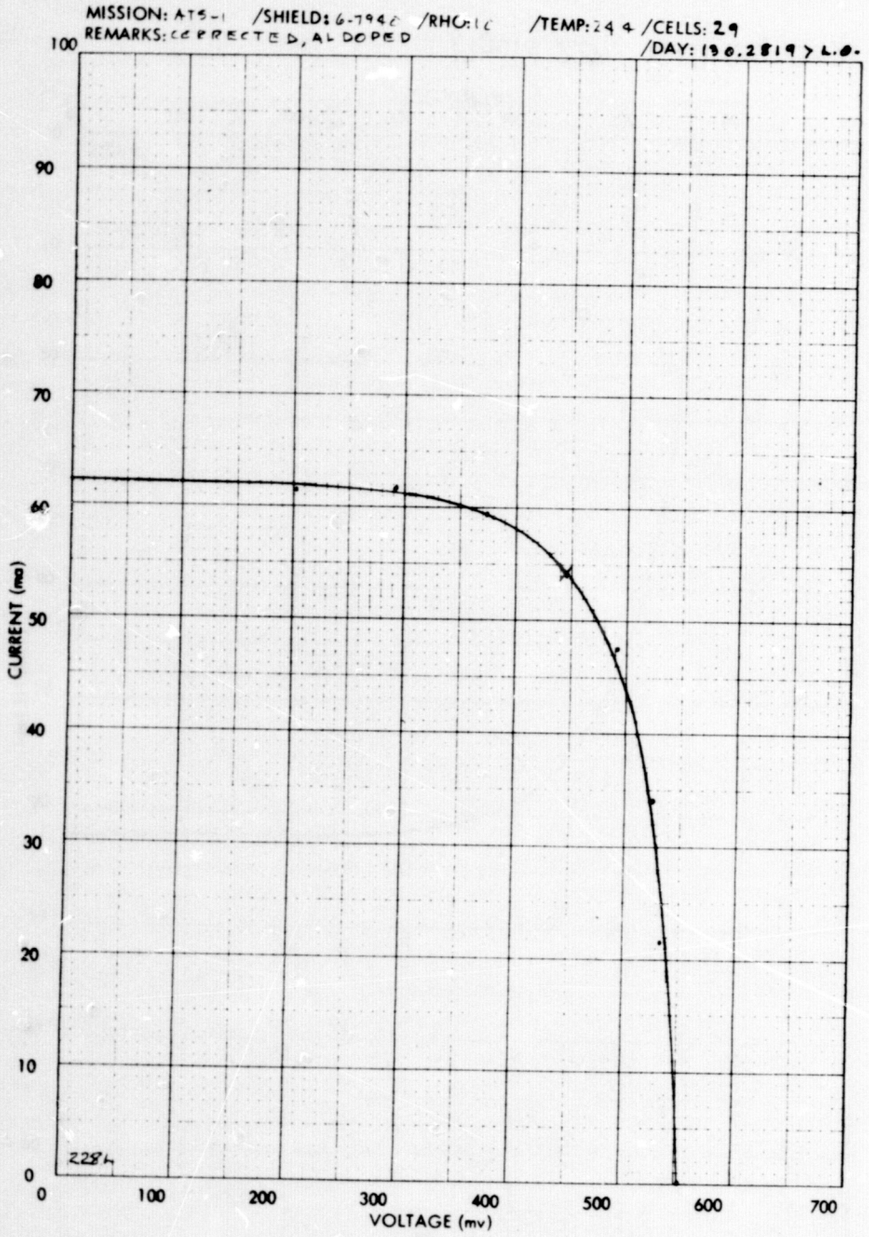


Figure 227. Cell 29, Days 60.6 and 100.6. Corrected Data



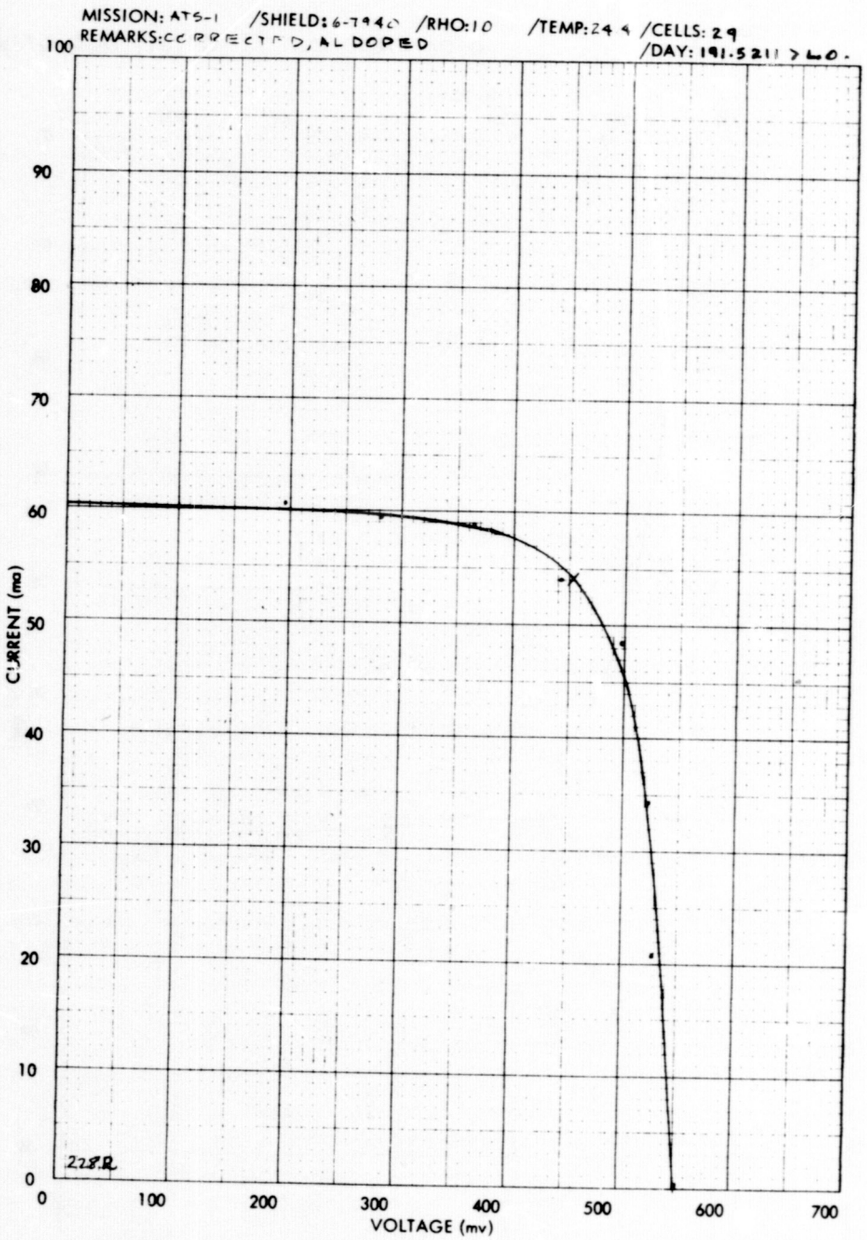
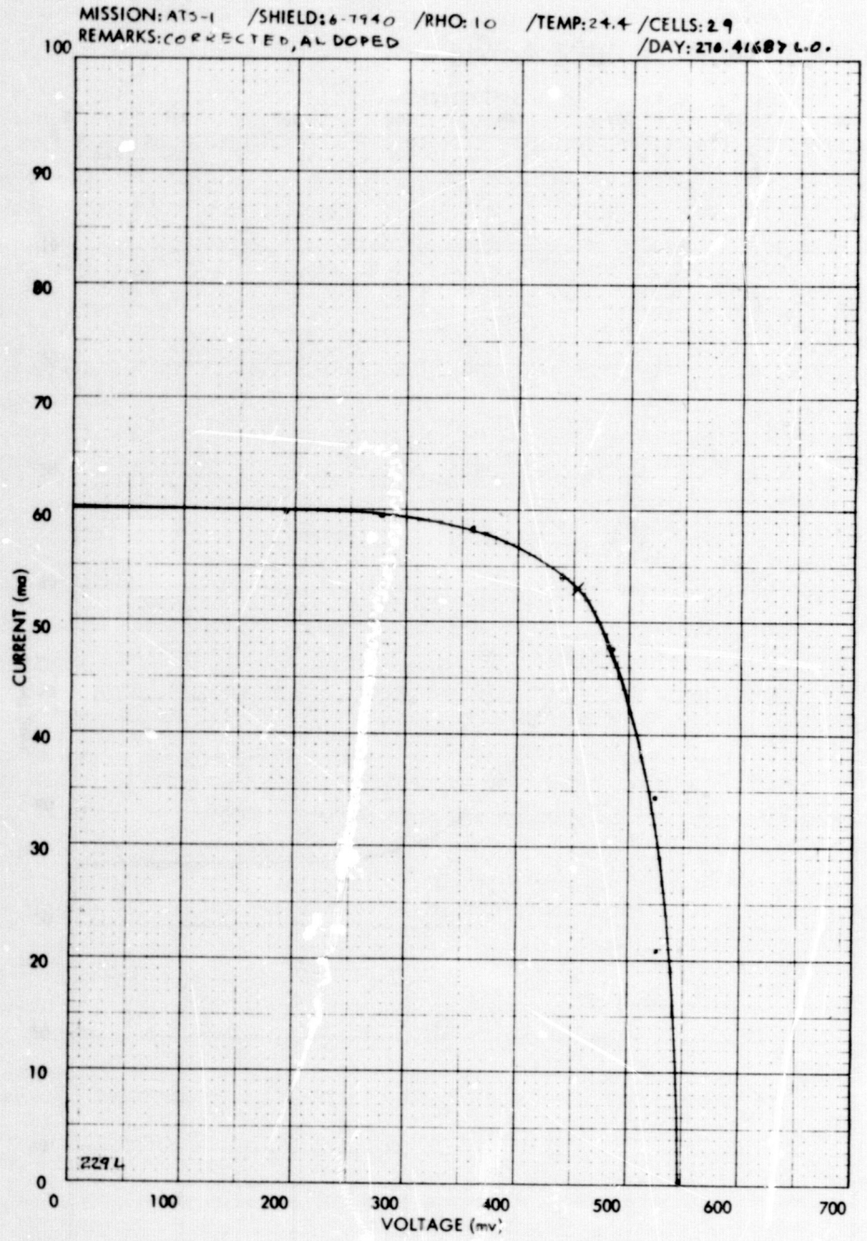


Figure 228. Cell 29, Days 130.2 and 191.5. Corrected Data



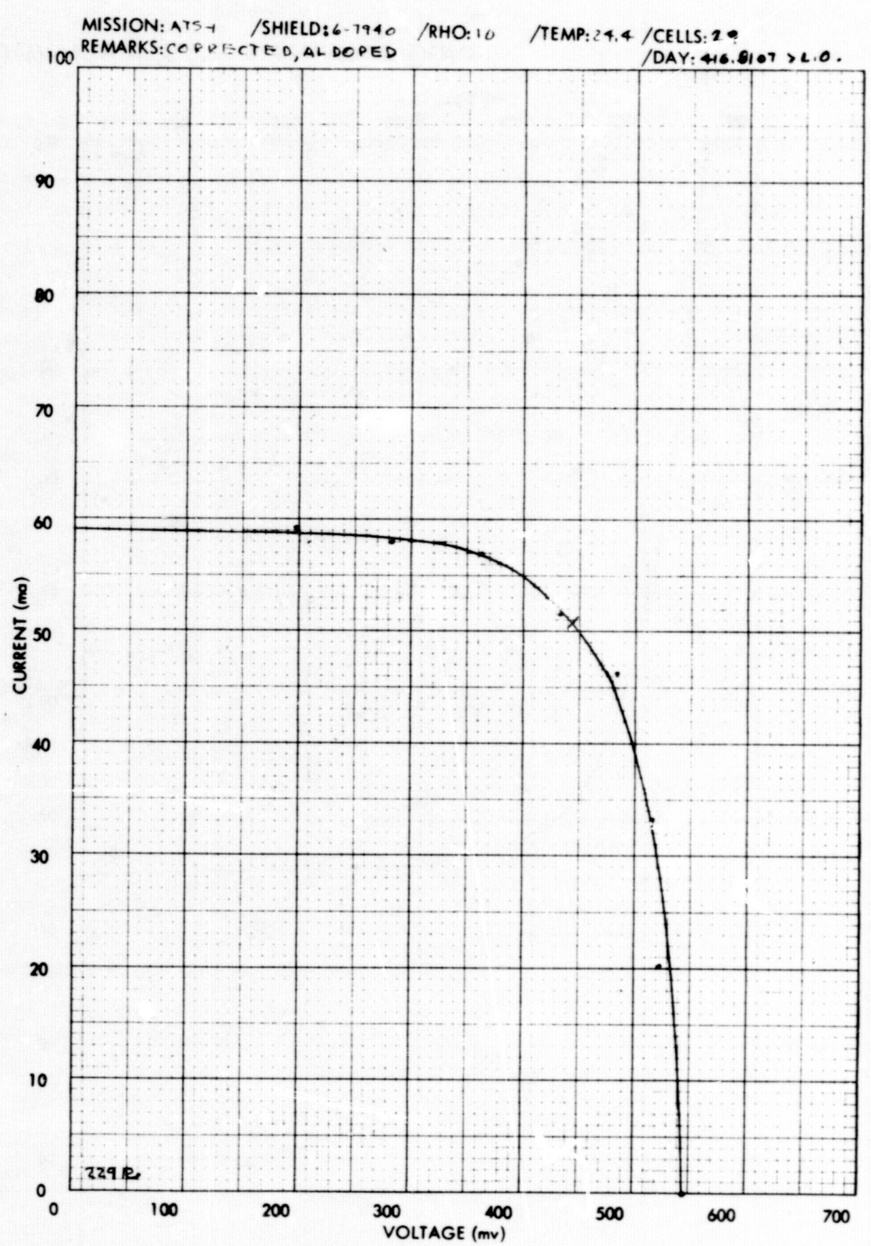
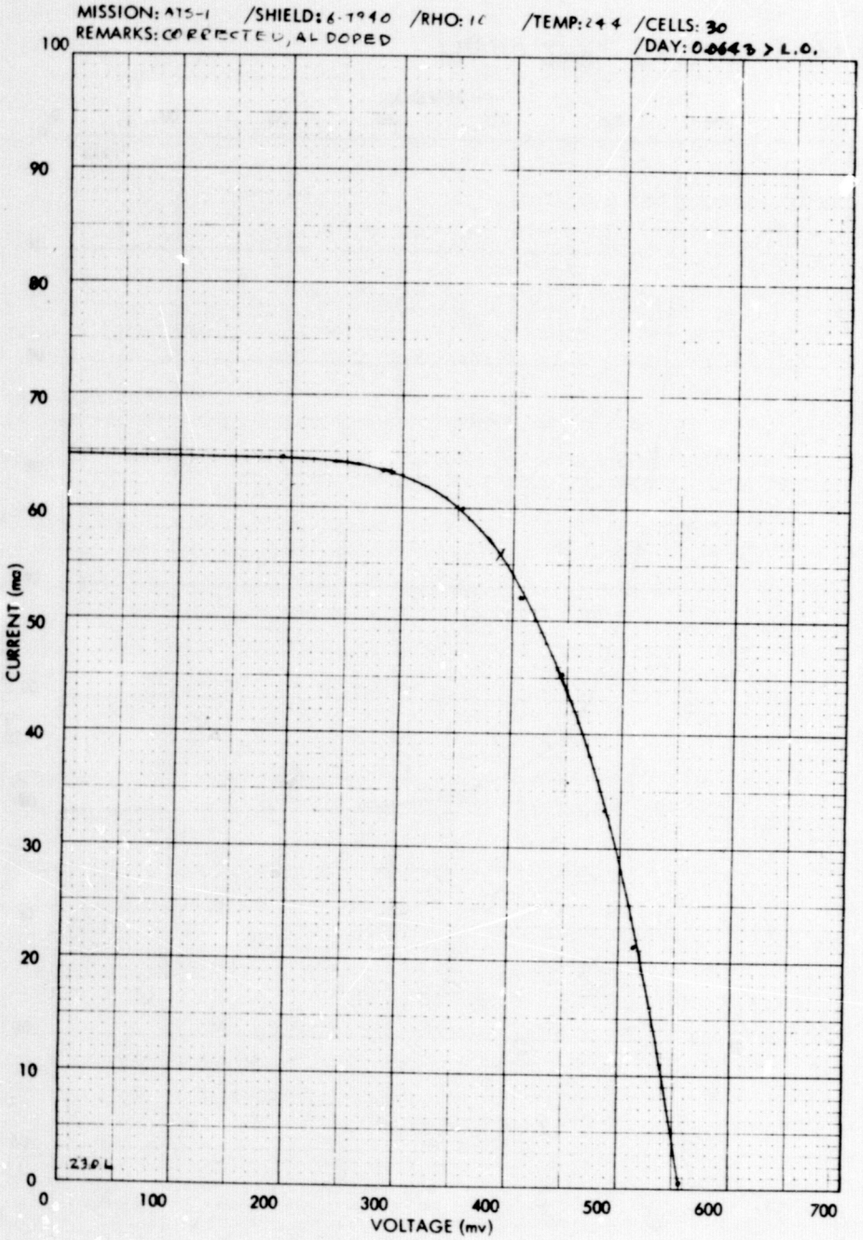


Figure 229. Cell 29, Days 270.4 and 416.8. Corrected Data



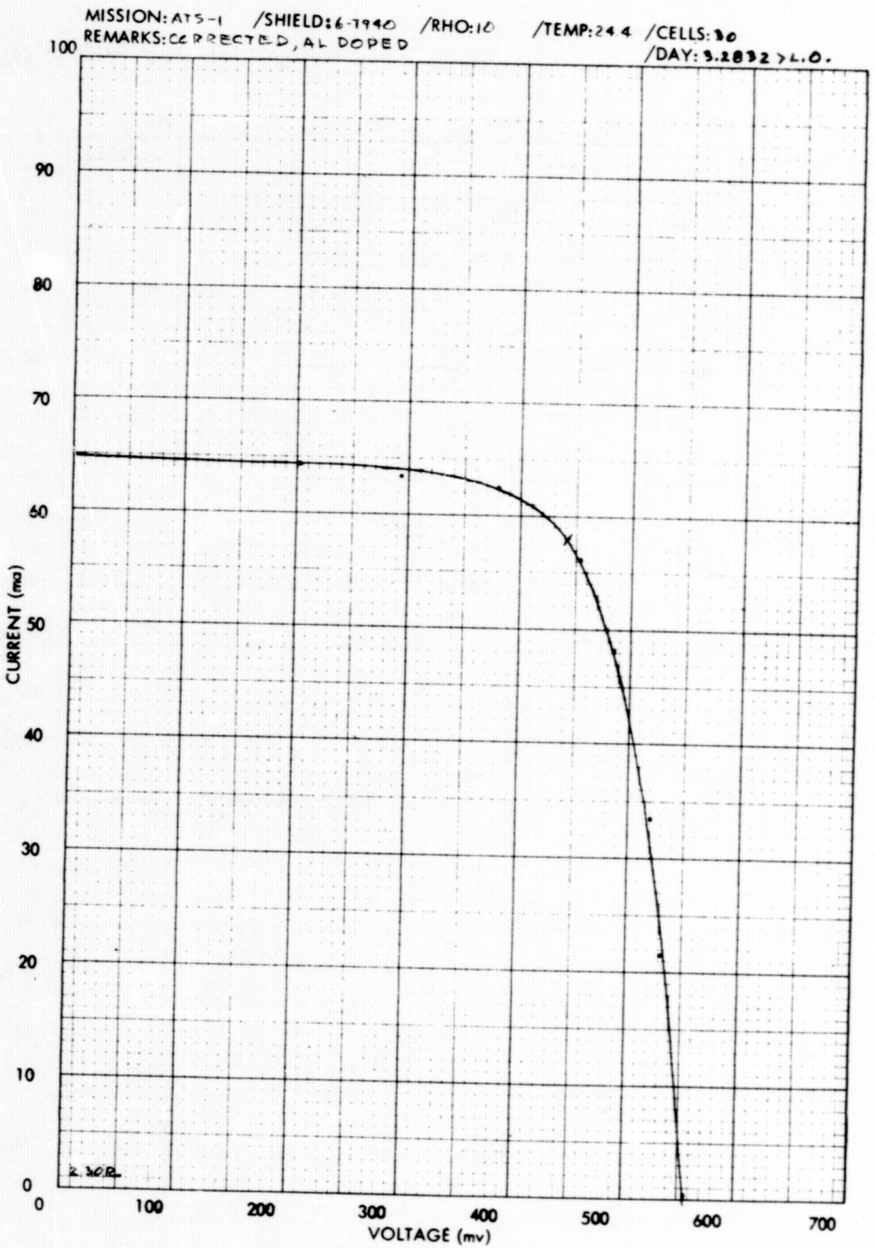
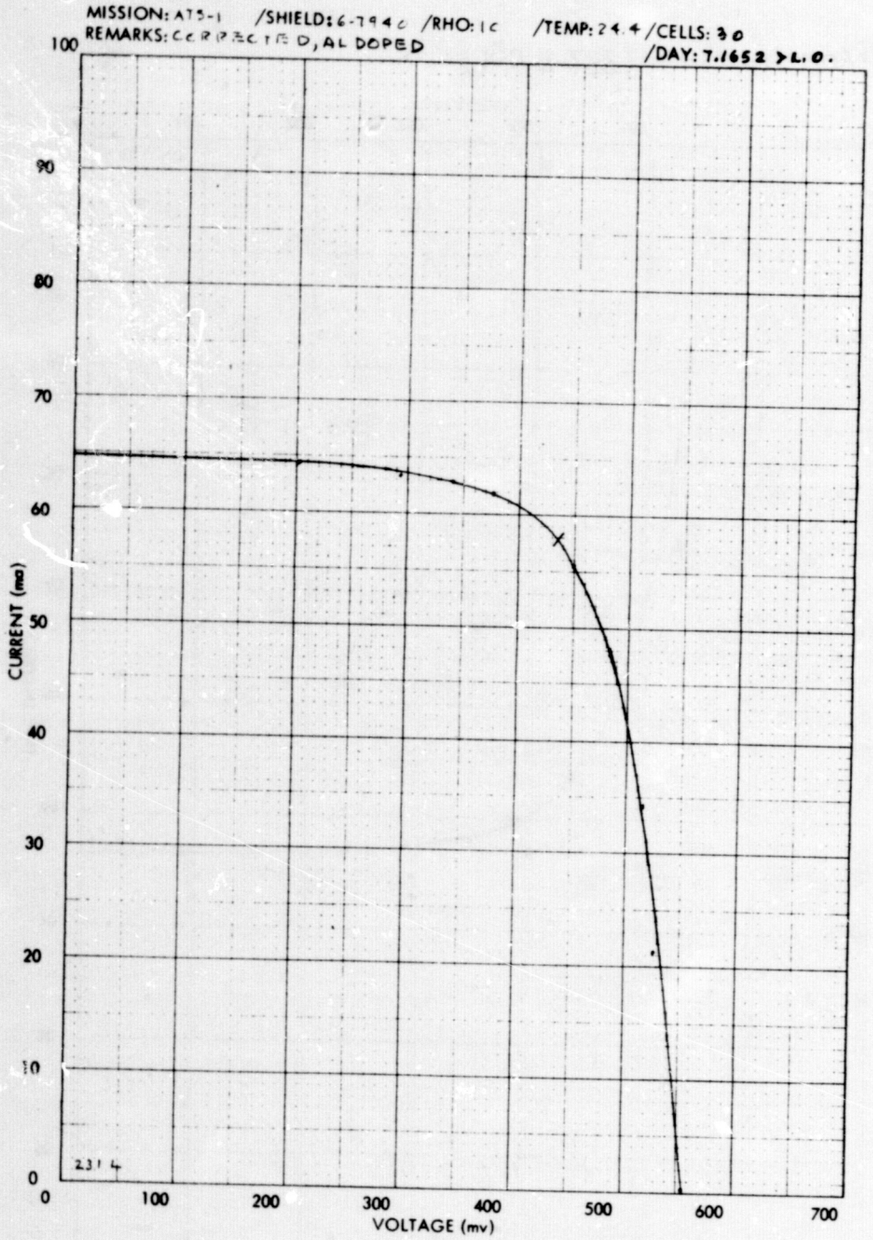


Figure 230. Cell 30, Days 0.064 and 3.2. Corrected Data



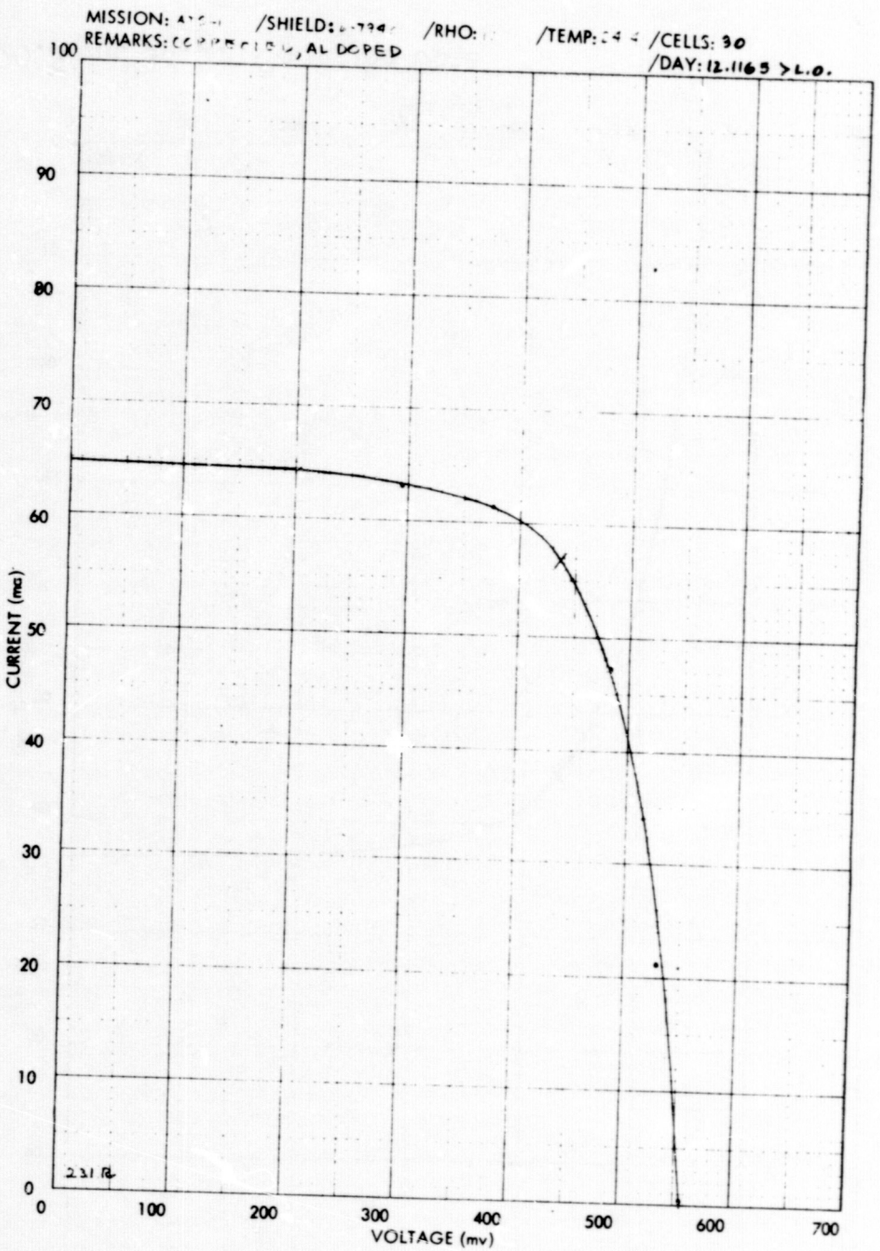


Figure 231. Cell 30, Days 7.1 and 12.1. Corrected Data

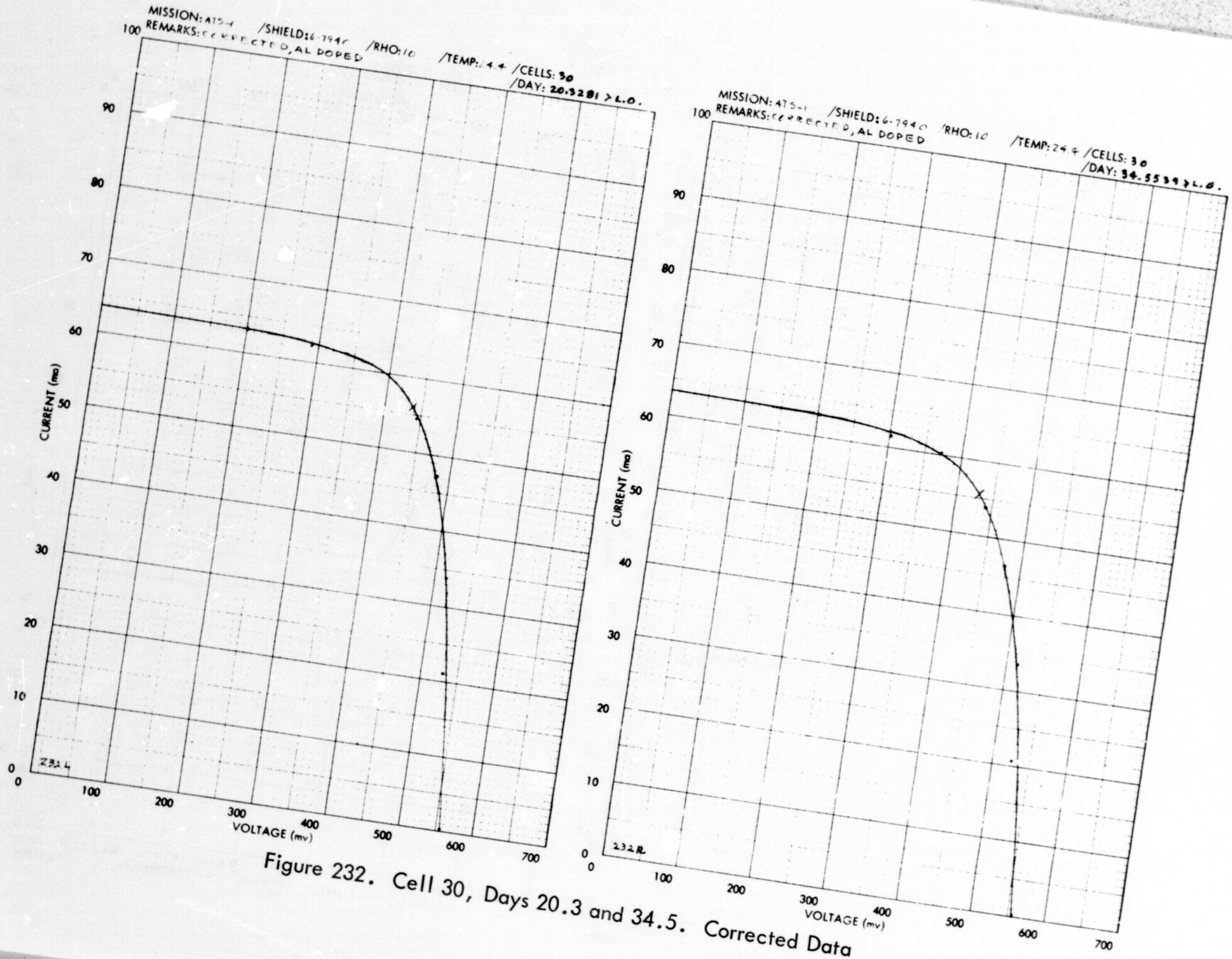


Figure 232. Cell 30, Days 20.3 and 34.5. Corrected Data

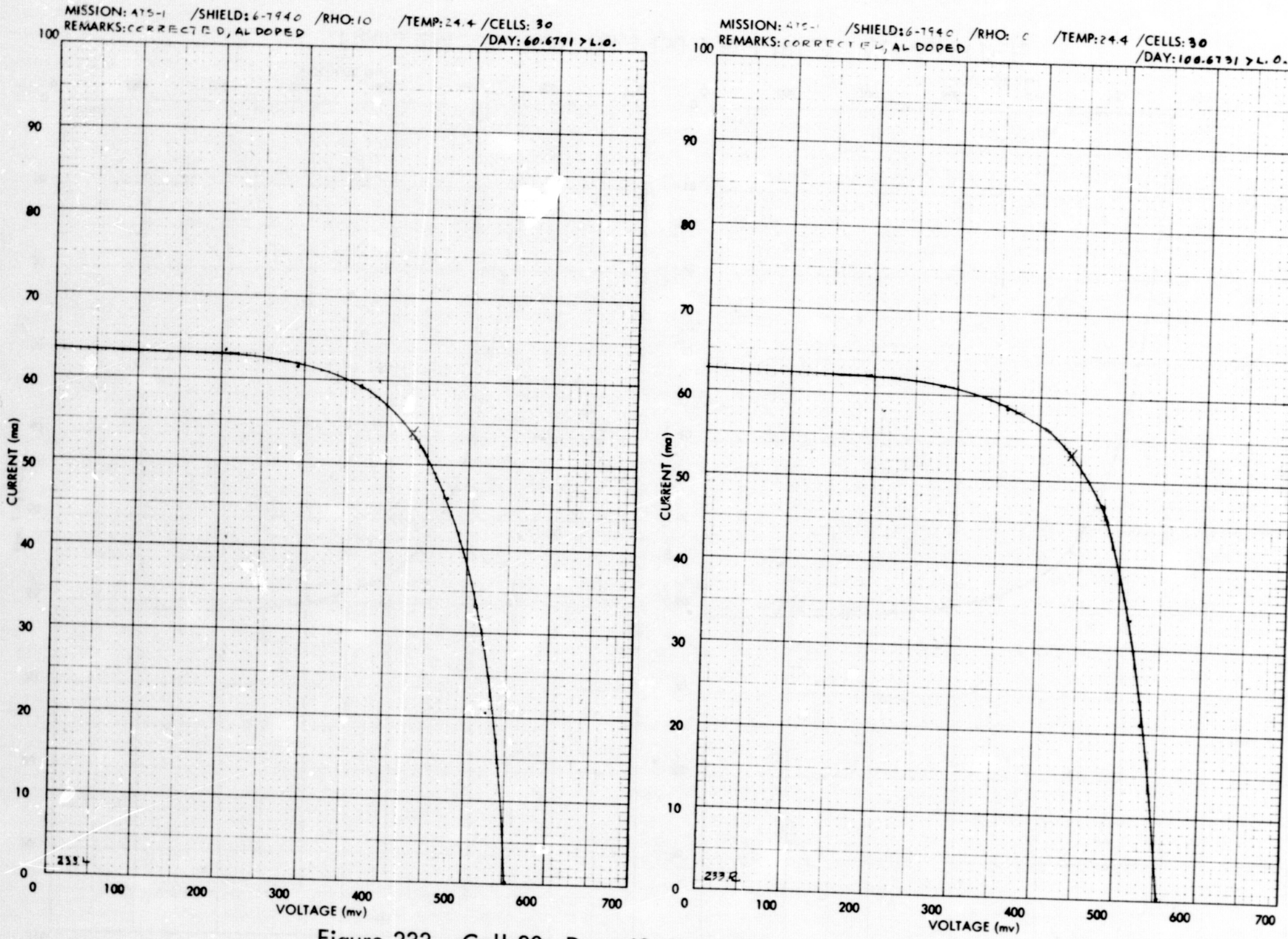
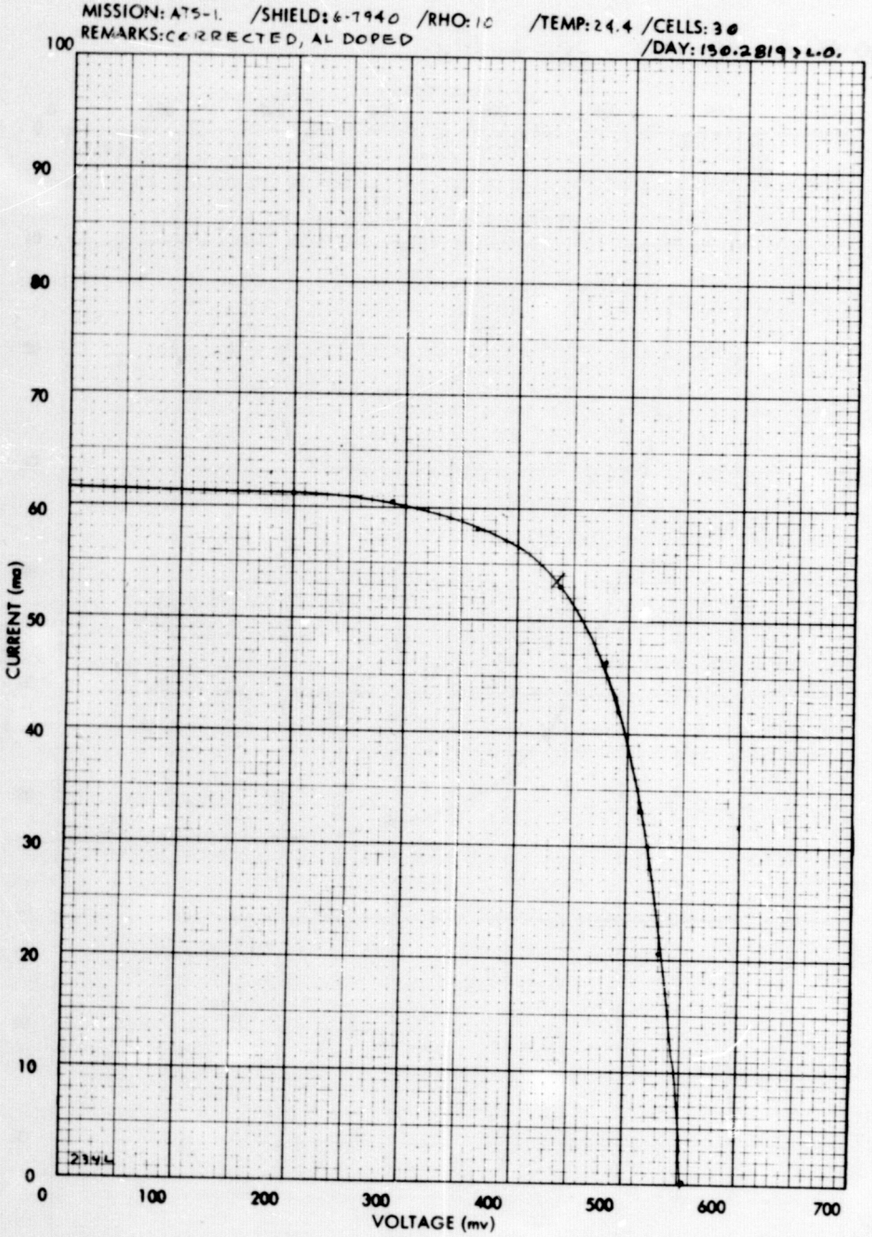


Figure 233. Cell 30, Days 60.6 and 100.6. Corrected Data



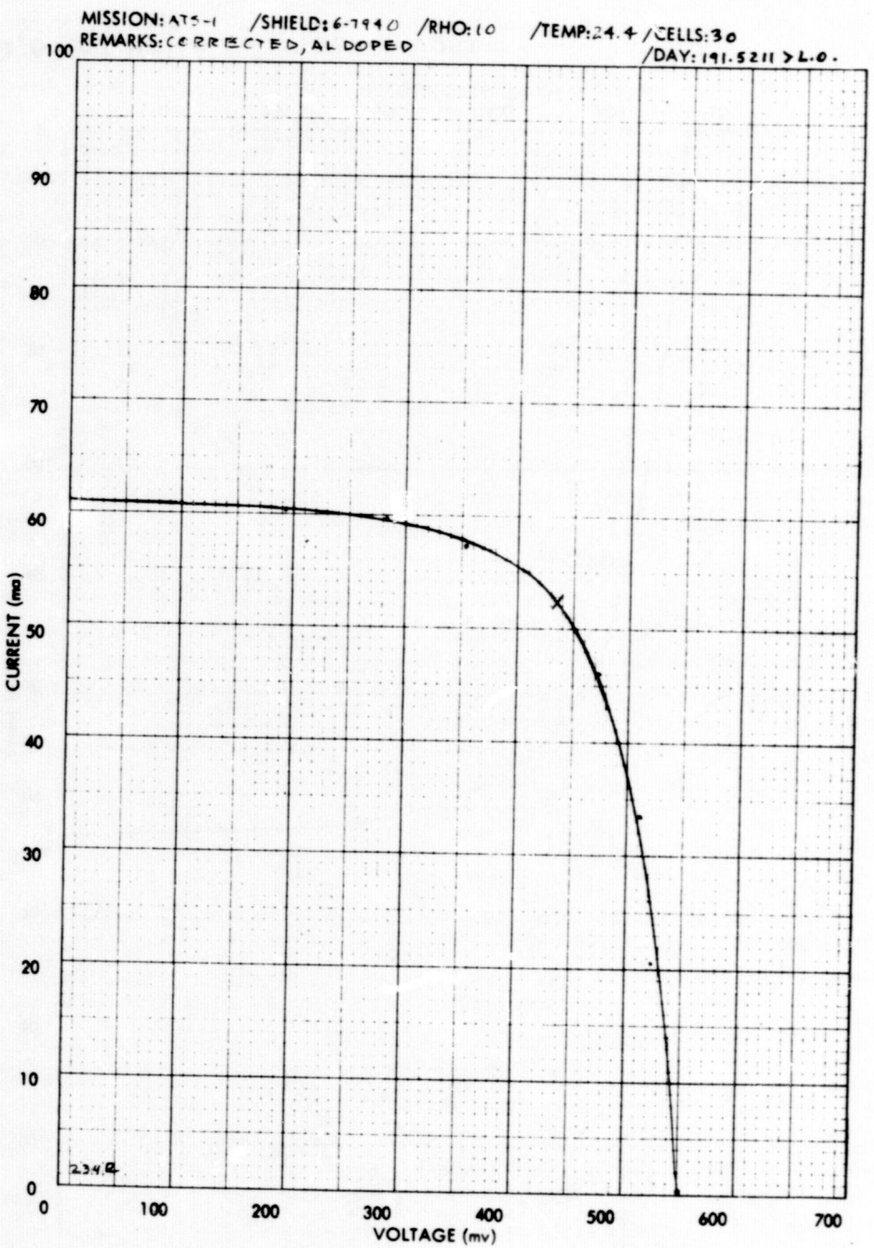
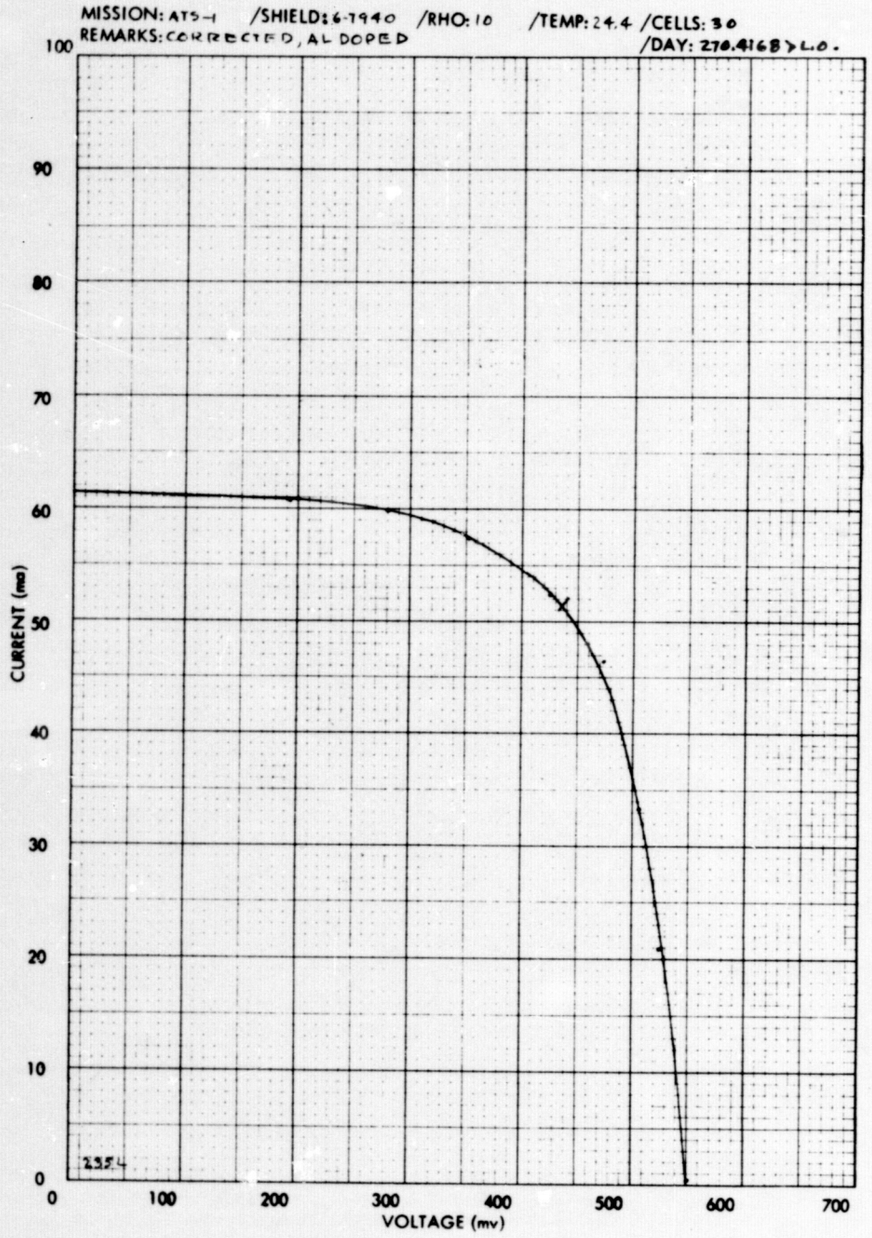


Figure 234. Cell 30, Days 130.2 and 191.5. Corrected Data



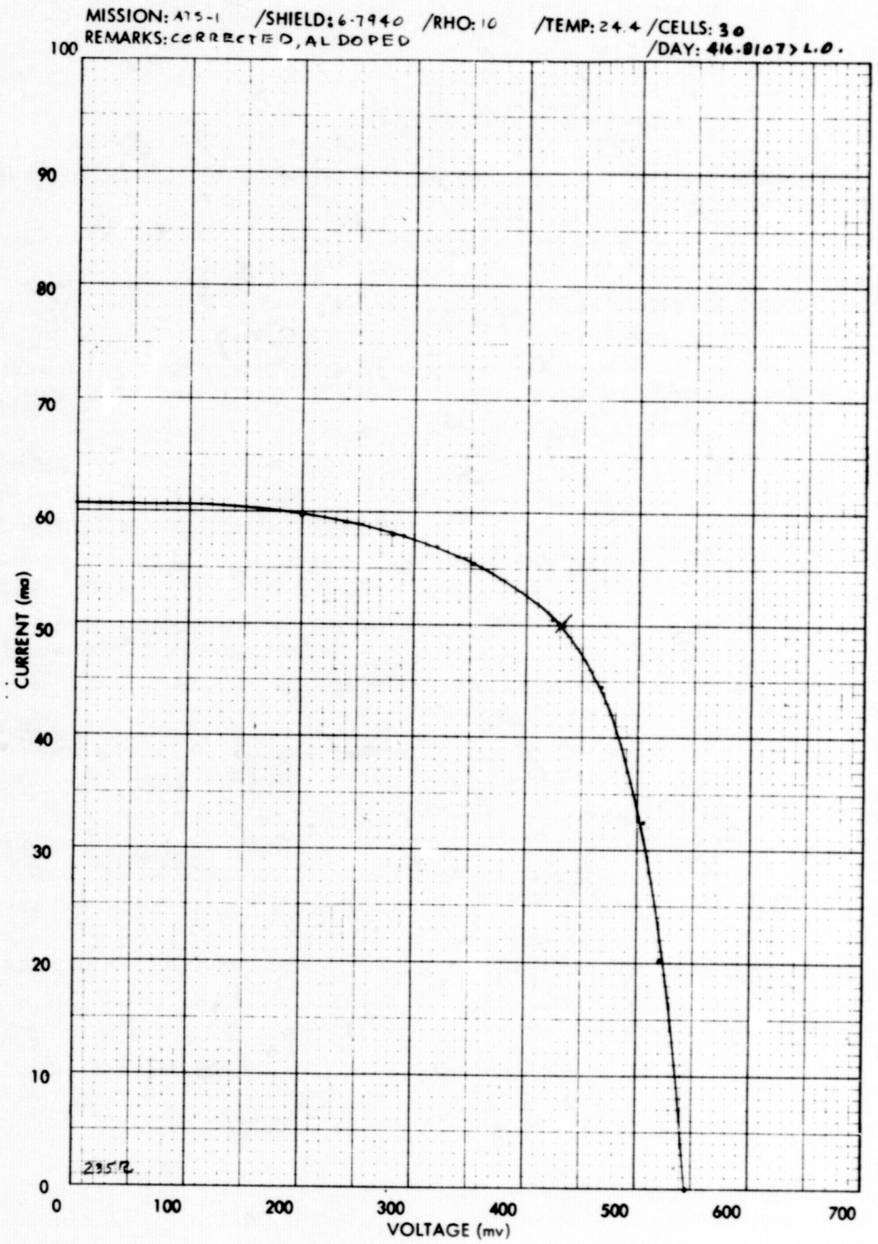


Figure 235. Cell 30, Days 270.4 and 416.8. Corrected Data

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Table I

Cell and Shield Information

Cell Number	Base Resistivity (ohm-cm)	Base Dopant	Shield			Remarks
			Thickness (mils)	Material	mgm/cm^2	
1	10	AL	30	SAP	305	Blue sens., no adhesive or filters
2	10	AL	30	SAP	305	Blue sens., no adhesive or filters
3	13	B	6	7940	33.6	
4	13	B	6	7940	33.6	
5	10	B	6	7940	33.6	
6	10	B	6	7940	33.6	
7	7	B	6	7940	33.6	
8	7	B	6	7940	33.6	
9	3	B	6	7940	33.6	
10	3	B	6	7940	33.6	
11	GR	B	6	7940	33.6	Drift field base doping
12	GR	B	6	7940	33.6	Drift field base doping
13	1	P	0	NONE	0	P-ON-N construction
14	1	B	0	NONE	0	
15	10	B	6	7940	33.6	
16	10	B	6	7940	33.6	
17	10	B	1	0211	38.3	Integral, thermally fused cover
18	10	B	1	0211	38.3	Integral, thermally fused cover
19	10	B	60	7940	336	Switching failed early
20	10	B	60	7940	336	
21	10	B	30	7940	168	
22	10	B	30	7940	168	
23	10	B	15	7940	83.9	
24	10	B	15	7940	83.9	
25	10	B	0	NONE	0	
26	10	B	0	NONE	0	
27	10	AL	30	7940	168	
28	10	AL	30	7940	168	
29	10	AL	6	7940	33.6	
30	10	AL	6	7940	33.6	Abnormally low initial power, improved

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Table II

Times and Conditions of Observation

Time After Launch (days)	Time of Observation (GMT)				Aspect Angle (deg)	Satellite to Sun Distance (A.U.)	Temperature (deg. C)
	Year	Day No.	Month	Day			
0.0643	1966	341.1560	Dec	7	83.49	0.9852033	19.0
3.2832	1966	344.3749	Dec	10	67.46	0.9848335	22.7
7.1652	1966	348.2569	Dec	14	67.46	0.9843873	23.5
12.1165	1966	353.2082	Dec	19	66.47	0.9839111	24.4
20.3281	1966	361.4198	Dec	27	66.47	0.9834069	24.4
34.5539	1967	10.6456	Jan	10	67.46	0.9834303	25.3
60.6791	1967	36.7708	Feb	5	73.41	0.9859348	26.1
100.6731	1967	76.7648	Mar	17	87.45	0.9949607	24.4
130.2819	1967	106.3736	Apr	16	98.52	1.0034855	27.0
191.5211	1967	167.6128	Jun	16	113.49	1.0158391	25.3
270.4168	1967	246.5085	Sep	3	97.45	1.0088254	24.4
416.8107	1968	27.9024	Jan	27	70.45	0.9846654	28.6

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Table III

Solar Cell Voltage and Current Values After Various Times in Orbit

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (n.a)	(6) Corrected Voltage (mv)
0.0643	1	47.5	147.8	46.5	130.6
		47.7	219.3	46.6	199.6
		47.3	288.3	46.2	266.4
		46.8	378.7	45.7	353.9
		43.5	439.4	42.7	415.5
		32.2	486.2	32.1	466.3
		20.2	506.0	20.5	490.7
		0.27	531.0	0.67	516.4
3.2832	1			46.3	140.4
				46.1	208.4
				45.8	275.5
				45.0	360.6
				42.6	425.9
				31.6	472.3
				19.9	493.6
				0.36	518.2
7.1652	1			45.2	138.2
				46.0	209.1
				45.6	275.7
				44.6	358.2
				42.2	423.5
				31.3	470.1
				19.7	491.5
				0.33	513.2
12.1165	1			45.6	141.9
				45.5	209.2
				45.9	279.8
				44.4	359.7
				42.2	426.5
				31.1	470.1
				19.5	490.6
				0.26	515.2

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	1	44.6	138.6	45.6	141.7
		44.4	204.1	45.4	208.9
		44.3	270.1	45.3	276.5
		43.8	354.5	44.4	359.4
		41.1	415.1	41.9	423.1
		31.0	468.1	31.1	469.9
		19.6	491.0	19.5	490.5
		0.26	516.0	0.26	515.2
34.5539	1			45.0	142.1
				45.1	209.9
				45.0	276.8
				43.6	355.7
				41.4	420.8
				30.6	464.7
				19.4	489.6
				0.19	514.3
60.6791	1			44.2	141.9
				44.7	210.3
				44.3	274.8
				43.3	355.6
				40.6	415.4
				29.9	457.8
				19.0	486.6
				0.12	512.4
100.6731	1	44.6	138.6	44.1	137.2
		44.4	204.1	43.9	202.1
		44.3	270.1	43.8	266.9
		43.4	351.5	42.8	346.8
		40.8	412.1	40.5	409.5
		30.6	462.1	30.5	459.8
		19.4	487.9	19.5	488.2
		0.26	513.0	0.26	511.3

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	1			43.7	142.7
				43.4	206.7
				43.3	271.7
				42.7	353.8
				40.3	415.7
				30.1	464.0
				19.0	486.8
				0.12	513.6
191.5211	1			42.7	135.2
				42.3	196.9
				42.4	261.3
				42.0	343.0
				41.2	419.1
				31.1	472.3
				19.4	489.6
				0.19	513.2
270.4168	1			43.3	134.8
				42.5	195.3
				42.4	258.4
				42.4	343.5
				40.5	409.1
				30.5	460.4
				19.3	484.5
				0.26	511.0
416.8107	1	41.6	129.3	41.3	139.4
		41.7	191.9	41.5	202.2
		41.8	254.9	41.7	266.2
		41.2	333.3	40.9	343.5
		39.0	393.9	38.7	403.6
		29.6	447.0	29.1	453.6
		18.8	472.9	18.5	481.5
		0.25	501.0	-0.07	509.3

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	2	48.5	151.4	47.5	133.6
		47.7	219.3	46.8	200.1
		47.8	291.3	46.8	269.7
		46.8	378.3	45.8	353.8
		43.2	436.3	42.5	411.8
		32.2	486.2	31.9	462.0
		20.3	509.0	20.6	493.0
		0.27	537.0	0.68	522.8
3.2832	2			47.2	143.7
				46.7	211.0
				46.2	278.0
				45.2	361.8
				42.3	423.3
				31.3	467.1
				20.1	498.6
				0.36	522.0
7.1652	2			47.5	145.9
				48.1	218.7
				47.6	287.4
				46.2	370.9
				43.1	432.6
				31.7	476.0
				20.1	499.3
				0.33	520.9
12.1165	2			46.2	144.0
				45.5	209.1
				45.8	279.3
				44.6	360.8
				41.5	419.2
				30.9	466.0
				19.8	496.7
				0.26	522.1

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	2	44.6	139.0	46.1	143.8
		44.4	204.1	46.0	211.6
		44.3	270.1	45.7	278.4
		43.8	354.1	44.6	360.5
		41.1	415.1	41.5	418.9
		31.0	468.1	30.6	462.7
		19.6	491.0	19.8	496.6
		0.26	516.0	0.26	522.1
34.5539	2			45.9	145.5
				45.7	212.9
				45.4	279.5
				43.8	356.9
				40.8	415.3
				30.2	459.6
				19.4	491.7
				0.19	521.3
60.6791	2			45.6	146.7
				45.0	212.0
				44.5	276.4
				43.2	354.8
				40.2	411.9
				29.9	456.9
				19.1	487.7
				0.13	520.4
100.6731	2	45.5	142.1	45.1	140.7
		45.0	207.2	44.6	205.1
		44.8	273.1	44.2	269.9
		43.8	354.1	43.0	348.0
		40.5	409.1	40.2	405.5
		30.6	462.1	30.4	458.5
		19.6	491.0	19.5	490.0
		0.26	519.0	0.26	518.7

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	2			44.5	145.9
				44.0	209.5
				43.6	273.3
				42.8	354.0
				39.7	409.4
				30.2	465.2
				19.1	491.1
				0.06	520.7
191.5211	2			43.4	138.0
				43.1	201.0
				43.1	265.2
				42.7	348.4
				40.6	412.5
				30.9	470.0
				19.5	492.9
				0.19	518.4
270.4168	2			40.8	127.2
				40.4	185.8
				39.9	243.6
				39.5	319.5
				—	—
				29.6	447.1
				19.2	481.6
				0.26	511.6
416.8107	2	39.6	123.6	39.8	135.5
		39.1	179.7	39.3	192.7
		—	—	—	—
		38.2	308.7	37.1	316.8
		—	—	—	—
		29.6	447.0	28.7	448.5
		19.1	478.9	18.7	488.8
		0.25	504.0	-0.07	514.6

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	3	65.4	203.2	64.5	182.0
		65.6	302.2	64.4	282.7
		63.7	387.8	62.5	365.6
		56.9	460.0	56.0	437.2
		48.6	490.9	48.3	471.8
		34.2	516.4	34.4	501.1
		21.2	533.1	21.6	520.3
		0.28	555.0	0.69	542.5
3.2832	3			64.4	196.9
				64.5	294.0
				62.6	377.9
				56.0	449.5
				47.7	477.9
				33.9	507.1
				21.1	522.9
				0.37	544.0
7.1652	3			64.3	197.6
				63.7	295.4
				62.0	375.3
				55.2	443.9
				47.4	475.5
				33.4	501.9
				20.9	520.7
				0.34	541.9
12.1165	3			64.3	200.0
				63.0	290.6
				61.1	372.0
				53.7	434.4
				46.8	472.3
				33.3	503.0
				20.8	520.7
				0.27	540.8

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	3	60.4	187.8	63.2	196.6
		59.6	274.8	62.3	287.1
		58.2	354.5	60.5	368.5
		52.7	426.7	54.2	438.9
		46.2	466.6	46.7	472.1
		33.0	498.3	33.3	502.9
		20.6	518.1	20.7	520.7
		0.27	540.0	0.27	540.8
34.5539	3			63.0	198.0
				62.1	288.5
				59.7	366.0
				53.4	434.8
				46.0	466.8
				32.9	499.6
				20.5	518.6
				0.20	539.8
60.6791	3			63.3	201.0
				61.4	287.5
				59.0	364.1
				52.6	430.7
				45.6	465.3
				32.6	498.6
				20.3	515.5
				0.14	537.8
100.6731	3	62.4	194.0	61.8	192.0
		60.9	280.9	60.3	278.1
		58.7	357.5	58.1	354.0
		53.1	429.7	52.7	426.0
		46.2	466.6	46.0	464.1
		33.0	498.3	32.9	497.3
		20.6	518.1	20.6	517.5
		0.27	540.0	0.27	539.6

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	3			61.2	197.1
				60.6	286.2
				57.8	359.1
				52.4	431.4
				45.4	466.3
				32.3	496.9
				20.1	516.4
				0.07	514.3
191.5211	3			59.8	188.3
				58.8	273.6
				57.2	351.0
				52.5	427.2
				45.5	462.5
				32.6	496.0
				20.3	514.1
				0.20	539.5
270.4168	3			56.9	176.9
				55.8	257.1
				54.0	329.0
				49.6	401.6
				44.3	447.7
				32.2	486.0
				20.4	511.1
				0.26	529.8
416.8107	3	55.5	172.4	56.5	186.3
		—	—	—	—
		52.7	321.2	53.3	335.7
		49.0	396.4	49.0	408.5
		43.8	442.4	43.7	454.3
		—	—	—	—
		20.3	509.0	20.0	519.1
		0.27	534.0	-0.05	543.3

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	4	64.4	200.1	63.2	183.3
		63.6	292.5	62.8	274.9
		61.7	375.7	60.8	355.6
		55.7	450.9	54.8	428.2
		48.3	487.8	48.1	469.2
		34.4	519.4	34.5	502.3
		21.5	539.1	21.8	524.5
		0.28	558.0	0.69	545.8
3.2832	4			63.3	193.6
				62.7	285.1
				60.4	364.5
				54.4	436.4
				47.5	476.0
				34.0	509.2
				21.4	531.8
				0.38	548.1
7.1652	4			63.2	194.3
				62.6	285.7
				59.8	362.0
				54.0	433.9
				47.2	473.6
				33.6	503.9
				21.0	523.9
				0.34	545.9
12.1165	4			62.4	194.1
				62.3	286.5
				59.9	364.6
				53.7	434.5
				46.6	470.3
				33.3	502.7
				20.9	523.9
				0.29	544.9

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	4	59.4	184.8	62.3	193.9
		58.9	271.1	62.2	286.2
		56.7	345.4	59.3	361.0
		51.6	417.6	53.3	431.1
		45.3	457.5	46.2	467.0
		33.0	498.3	33.3	502.6
		20.6	518.1	20.8	520.8
		0.27	553.0	0.27	544.8
34.5539	4			61.9	194.8
				61.7	286.0
				58.6	359.0
				52.2	424.9
				45.7	464.7
				32.8	498.5
				20.5	518.6
				0.2	543.8
60.6791	4			62.4	198.3
				62.2	290.3
				59.8	368.8
				53.9	441.0
				46.8	477.8
				33.5	511.6
				20.9	530.7
				0.14	553.8
100.6731	4	61.4	190.9	60.8	189.0
		60.9	280.3	60.5	278.5
		58.2	354.5	57.9	352.3
		52.4	423.7	51.8	419.1
		45.6	460.6	45.5	460.0
		33.0	498.3	32.9	496.8
		20.6	518.1	20.6	517.2
		0.27	540.0	0.27	540.4

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	4			60.8	195.5
				59.7	281.3
				57.2	355.1
				51.0	419.7
				44.8	460.4
				32.3	497.2
				20.2	516.5
				0.07	541.2
191.5211	4			59.7	187.8
				59.0	273.6
				56.4	346.0
				50.7	412.5
				44.7	454.6
				32.6	495.7
				20.4	515.1
				0.20	541.7
270.4168	4			59.6	185.4
				58.4	268.6
				56.1	341.3
				50.8	411.3
				44.6	450.4
				32.4	489.7
				20.5	514.7
				0.27	538.9
416.8107	4	57.4	178.6	58.5	192.5
		56.3	258.9	57.8	276.5
		53.7	327.2	54.7	344.7
		48.6	393.4	48.8	406.7
		42.9	433.3	43.1	447.7
		31.4	474.1	31.5	490.2
		19.9	500.0	19.6	510.1
		0.26	525.0	-0.06	536.3

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	5	69.3	215.6	67.8	197.2
		68.9	316.8	67.6	296.7
		67.2	409.0	66.5	389.7
		59.5	481.2	58.6	457.9
		50.4	509.0	50.2	490.7
		35.4	534.5	35.6	518.6
		22.0	551.2	22.3	536.9
		0.29	570.0	0.69	558.7
3.2832	5			67.3	206.0
				67.4	306.6
				65.7	396.5
				58.4	468.8
				49.9	499.4
				34.9	523.0
				21.8	541.9
				0.38	560.4
7.1652	5			67.2	206.8
				66.6	304.1
				65.1	394.0
				58.0	466.4
				49.5	497.1
				34.7	520.8
				21.6	536.7
				0.35	558.3
12.1165	5			66.3	206.1
				67.1	308.8
				64.9	395.4
				57.8	463.5
				49.2	497.2
				34.6	522.7
				21.5	539.9
				0.28	557.4

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	5	63.4	197.1	66.2	205.8
		62.9	289.4	66.4	305.2
		62.2	378.7	64.9	395.0
		56.1	453.9	57.7	467.2
		48.3	487.8	49.2	496.9
		34.4	519.4	34.6	522.6
		21.4	536.1	21.5	539.8
		0.28	555.0	0.28	557.3
34.5539	5			65.9	207.4
				66.4	307.7
				64.4	394.4
				57.4	466.8
				48.7	494.8
				34.3	521.7
				21.3	537.8
				0.21	556.4
60.6791	5			65.8	208.9
				65.5	305.7
				63.6	392.0
				56.5	462.2
				48.2	491.6
				33.9	517.7
				21.0	534.7
				0.15	554.3
100.6731	5	66.3	206.3	65.7	204.2
		65.6	301.6	64.9	298.6
		64.2	390.9	63.6	383.5
		57.2	463.0	56.7	458.3
		48.6	490.9	48.4	488.9
		34.4	519.4	34.3	518.3
		21.4	536.1	21.4	536.7
		0.28	555.0	0.28	555.8

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	5			64.9	208.6
				64.6	304.1
				63.1	391.5
				56.4	463.6
				47.9	492.1
				33.9	520.2
				20.9	536.5
				0.08	555.2
191.5211	5			64.2	201.8
				63.4	294.1
				61.4	376.6
				57.3	466.0
				48.4	491.0
				34.2	519.7
				21.2	535.5
				0.21	554.3
270.4168	5			63.6	197.6
				63.4	291.4
				62.1	378.1
				56.4	456.4
				48.3	487.8
				34.1	515.2
				21.2	532.2
				0.28	552.5
416.8107	5	61.4	190.9	62.6	205.4
		61.6	283.3	62.8	300.1
		60.2	366.6	60.9	382.4
		54.6	441.9	54.8	455.5
		46.8	472.7	46.9	487.0
		33.2	501.3	33.0	513.3
		20.8	521.1	20.5	532.3
		0.27	540.0	0.05	551.0

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	6	68.3	213.2	67.5	197.9
		67.6	312.1	66.9	295.6
		66.2	403.6	65.6	386.2
		59.1	478.7	58.5	458.8
		50.4	509.0	50.2	491.2
		35.4	534.5	35.7	521.8
		22.0	551.2	22.4	540.1
		0.29	570.0	0.69	557.5
3.2832	6			66.3	202.9
				65.8	299.7
				65.2	393.4
				58.6	469.8
				49.6	496.1
				34.9	521.9
				21.9	543.3
				0.41	557.4
7.1652	6			66.4	205.1
				66.2	303.5
				64.4	390.4
				57.9	466.8
				49.2	494.6
				34.6	513.3
				21.7	539.7
				0.35	553.2
12.1165	6			65.6	204.7
				65.7	303.6
				64.4	392.9
				57.8	467.8
				49.1	495.6
				34.6	522.3
				21.5	540.7
				0.28	558.0

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	6	62.4	194.6	65.5	204.4
		62.3	287.6	65.6	303.2
		61.2	373.2	64.5	393.7
		56.1	454.4	57.4	466.1
		48.3	487.8	49.8	502.7
		34.4	519.4	34.7	523.4
		21.4	536.1	21.5	539.5
		0.27	558.0	0.28	558.0
34.5539	6			65.1	205.3
				65.2	303.5
				63.6	390.3
				57.3	466.9
				48.7	489.9
				34.2	520.0
				21.4	539.5
				0.21	556.9
60.6791	6			65.1	207.1
				64.6	302.5
				63.4	391.2
				56.3	460.3
				47.9	488.9
				33.9	516.8
				21.1	535.1
				0.15	555.8
100.6731	6	64.4	200.7	63.9	199.3
		64.2	296.7	63.7	294.3
		63.2	385.4	63.0	384.3
		56.9	460.5	56.4	456.9
		48.6	490.8	48.3	488.1
		34.4	519.4	34.4	519.7
		21.4	536.1	21.4	536.6
		0.29	555.0	0.28	554.7

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	6			64.4	207.2
				63.9	301.8
				62.0	384.9
				56.0	460.6
				47.8	490.3
				33.8	516.1
				20.9	536.1
				0.08	554.7
191.5211	6			63.0	198.8
				62.5	291.2
				61.2	375.6
				57.0	464.0
				48.7	494.1
				34.0	516.6
				21.3	537.9
				0.21	554.2
270.4168	6			62.7	195.6
				62.6	289.1
				61.9	377.7
				56.2	455.3
				48.6	490.4
				34.2	516.0
				21.3	534.2
				0.28	552.5
416.8107	6	60.4	188.4	61.6	202.1
		60.3	278.4	61.9	296.3
		59.7	364.2	61.1	383.5
		54.6	442.4	55.1	457.5
		46.8	472.7	46.7	483.7
		33.4	504.3	33.2	515.1
		20.8	521.1	20.5	532.4
		0.28	543.0	0.05	552.1

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	7	64.4	200.8	63.0	183.8
		63.6	293.1	62.2	273.3
		62.7	382.4	61.5	361.0
		57.2	463.6	56.4	441.5
		49.8	503.0	49.4	482.9
		35.4	534.5	35.6	519.0
		22.0	551.2	22.3	538.0
		0.29	573.0	0.70	559.3
3.2832	7			62.4	191.4
				62.1	283.2
				60.7	366.7
				56.4	453.5
				48.7	488.0
				34.8	520.4
				21.8	542.3
				0.38	559.5
7.1652	7			62.3	192.1
				61.4	280.7
				60.1	364.2
				56.0	451.0
				48.3	485.6
				34.5	518.2
				21.5	537.1
				0.35	557.3
12.1165	7			62.3	194.4
				61.7	284.5
				59.9	365.3
				55.3	447.6
				47.9	484.1
				34.0	513.9
				21.4	537.0
				0.28	559.2

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	7	59.4	185.3	61.2	191.0
		58.9	271.7	61.0	281.1
		58.2	355.1	59.8	364.9
		53.5	433.3	54.8	444.1
		47.1	475.7	47.6	480.8
		34.0	513.4	34.0	513.8
		21.2	533.1	21.4	536.9
		0.28	555.0	0.28	556.2
34.5539	7			62.0	195.6
				60.4	280.8
				58.8	361.1
				54.2	441.7
				46.9	476.6
				33.6	509.6
				21.2	534.7
				0.21	555.1
60.6791	7			61.4	195.4
				60.4	282.7
				58.8	363.0
				53.2	435.4
				46.3	472.6
				33.2	506.7
				20.9	530.5
				0.14	552.8
100.6731	7	61.4	191.5	60.9	190.1
		60.3	277.8	59.8	275.5
		58.7	358.1	58.1	354.6
		53.5	433.3	53.0	429.6
		46.8	472.7	46.5	470.0
		33.8	510.4	33.7	509.1
		21.1	530.1	21.1	529.2
		0.28	552.0	0.28	551.7

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	7			60.1	193.8
				59.7	281.7
				57.1	355.1
				52.4	431.6
				45.7	469.1
				33.1	507.8
				20.6	528.4
				0.07	551.8
191.5211	7			59.1	186.4
				58.4	271.3
				57.2	351.4
				52.2	425.3
				45.7	463.8
				32.9	499.4
				20.9	528.2
				0.20	548.1
270.4168	7			58.8	183.3
				58.5	269.7
				56.9	348.0
				51.8	419.4
				45.9	463.3
				33.1	500.5
				20.9	525.6
				0.27	549.6
416.8107	7	57.4	179.2	57.3	189.5
		57.0	262.6	57.3	274.6
		54.7	333.8	54.9	345.6
		50.1	406.0	50.6	421.3
		44.4	448.4	44.4	460.6
		32.4	489.2	32.1	497.8
		20.4	512.0	20.1	521.7
		0.27	537.0	-0.05	547.2

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	8	64.4	200.8	63.0	184.5
		64.2	296.1	62.8	276.8
		63.7	388.5	62.9	370.9
		58.5	473.9	57.6	451.9
		50.4	509.0	50.0	490.3
		35.6	537.6	35.6	520.9
		22.1	555.2	22.4	541.1
		0.29	573.0	0.70	560.7
3.2832	8			62.5	192.0
				62.3	284.1
				61.7	372.9
				57.0	458.4
				49.3	493.9
				35.1	525.4
				21.8	540.8
				0.38	563.5
7.1652	8			62.4	192.6
				62.2	284.6
				61.6	373.3
				56.6	455.8
				48.9	491.4
				34.6	520.0
				21.6	538.5
				0.35	561.2
12.1165	8			62.6	195.4
				62.0	285.8
				61.4	374.4
				56.4	456.3
				48.6	490.5
				34.4	519.8
				21.5	538.4
				0.28	561.1

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	8	59.4	185.3	61.5	192.0
		59.6	274.8	61.9	285.5
		58.7	358.1	60.8	370.9
		54.2	439.3	55.9	452.7
		47.4	478.7	48.2	487.1
		34.0	513.4	34.2	516.5
		21.2	533.1	21.3	535.3
		0.28	558.0	0.28	561.1
34.5539	8			62.1	195.8
				61.3	284.5
				60.3	369.9
				54.8	446.2
				47.5	482.2
				33.9	514.1
				21.1	533.0
				0.21	555.7
60.6791	8			61.6	196.0
				59.5	278.4
				59.5	367.1
				53.7	439.7
				46.8	477.4
				33.4	510.2
				20.9	530.8
				0.14	553.4
100.6731	8	61.4	191.5	60.8	189.6
		60.9	280.9	60.4	278.5
		59.7	364.2	59.3	361.8
		54.2	439.3	53.8	435.4
		47.4	478.7	47.1	475.8
		34.0	513.4	33.9	511.5
		21.2	533.1	21.2	532.4
		0.28	555.0	0.28	554.6
130.2819	8			61.0	196.0
				60.2	283.5
				58.5	363.4
				53.5	440.5
				46.5	477.3
				33.3	510.8
				20.7	530.9
				0.07	551.5
191.5211	8			59.4	187.3
				59.0	274.2
				58.0	356.0
				53.4	434.5
				46.7	473.9
				33.6	510.7
				21.0	529.6
				0.21	553.6
270.4168	8			59.8	186.5
				59.0	271.9
				58.1	354.6
				53.1	430.1
				46.6	470.9
				33.6	507.6
				21.1	528.4
				0.27	549.8
416.8107	8	58.4	182.3	58.9	193.4
		57.6	265.6	58.1	277.7
		56.2	342.9	57.2	359.3
		51.3	415.1	51.4	427.4
		45.3	457.5	45.2	467.7
		32.8	495.3	32.4	502.8
		20.5	515.1	20.2	523.6
		0.27	540.0	-0.05	550.5

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	9	61.4	190.9	60.3	176.4
		60.9	280.9	60.1	265.4
		60.2	367.2	59.5	350.5
		57.2	463.6	56.3	442.5
		50.7	512.1	50.1	492.0
		36.4	549.6	36.5	534.5
		22.7	569.3	23.0	556.9
		0.29	588.0	0.70	578.1
3.2832	9			60.0	183.8
				59.8	272.8
				59.4	359.5
				56.2	452.2
				50.7	508.7
				35.98	539.5
				22.4	557.0
				0.39	580.0
7.1652	9			59.9	184.3
				59.7	273.1
				59.3	359.8
				55.8	449.3
				50.0	502.8
				35.7	536.9
				22.2	554.9
				0.36	577.6
12.1165	9			59.5	185.0
				59.3	273.2
				58.9	359.4
				55.6	450.4
				50.1	505.5
				35.5	536.6
				22.2	556.3
				0.29	575.2

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	9	56.4	175.5	59.4	184.8
		56.3	259.5	59.2	272.9
		55.2	336.9	58.3	355.9
		53.5	433.3	55.6	449.9
		48.3	487.8	49.7	502.0
		35.2	531.5	35.5	536.5
		22.0	551.2	22.0	553.2
		0.29	573.0	0.29	575.1
34.5538	9			58.6	184.3
				58.8	273.0
				58.6	359.5
				55.1	449.0
				49.2	499.4
				35.2	534.0
				21.9	551.9
				0.22	575.3
60.6791	9			58.9	186.7
				58.2	271.8
				57.6	355.0
				54.3	443.9
				48.5	494.1
				34.9	532.7
				21.7	551.3
				0.15	571.3
100.6731	9	58.4	181.7	57.8	179.8
		58.3	268.7	57.7	266.0
		57.7	352.0	57.4	349.8
		54.6	442.4	54.1	438.3
		49.8	493.9	48.5	490.1
		35.2	531.5	35.1	529.8
		22.0	551.2	21.9	550.4
		0.29	573.0	0.29	572.7

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	9			58.1	186.2
				57.4	270.2
				56.8	352.7
				53.9	443.3
				48.1	492.2
				34.8	532.6
				21.5	530.5
				0.08	572.1
191.5211	9			56.5	177.7
				56.0	260.0
				55.4	340.2
				53.4	435.0
				48.3	490.4
				35.0	531.6
				21.6	545.6
				0.21	569.1
270.4168	9			57.8	176.5
				56.1	258.4
				55.6	339.1
				53.4	432.3
				48.0	485.1
				34.9	526.6
				21.8	546.6
				0.28	568.7
416.8107	9	54.5	169.4	55.8	182.1
		53.6	247.3	54.7	261.4
		53.2	324.7	54.5	342.2
		51.3	415.1	52.1	432.0
		46.2	466.6	46.4	478.9
		33.8	510.4	33.6	519.8
		21.1	530.1	20.8	538.8
		0.28	558.0	-0.04	563.9

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	10	64.4	202.1	63.2	186.3
		62.9	291.3	61.8	273.4
		62.2	380.0	61.3	360.9
		58.0	469.6	57.1	448.3
		50.7	512.1	50.1	490.7
		36.4	549.6	36.6	534.9
		22.7	569.3	23.0	555.7
		0.30	591.0	0.70	578.7
3.2832	10			63.4	196.3
				62.4	285.7
				61.5	372.6
				57.1	459.3
				47.6	457.2
				35.6	532.9
				22.3	555.5
				0.36	576.2
7.1652	10			63.4	196.9
				61.6	283.0
				60.9	369.9
				56.7	456.6
				49.2	494.6
				35.3	530.5
				22.1	550.1
				0.36	573.9
12.1165	10			62.6	196.4
				61.8	286.3
				61.0	372.5
				56.1	454.5
				48.8	492.5
				34.9	527.3
				21.9	548.8
				0.29	570.8

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	10	59.4	186.5	62.5	196.2
		58.9	272.9	61.8	286.0
		57.7	352.6	60.9	372.1
		53.9	436.3	55.7	451.0
		47.7	481.8	48.4	489.1
		34.6	522.5	34.7	524.1
		21.7	545.2	21.7	545.7
		0.29	570.0	0.29	570.8
34.5539	10			62.1	196.9
				61.3	286.1
				60.1	569.6
				54.9	447.0
				47.8	485.3
				34.4	521.7
				21.6	544.5
				0.21	568.4
60.6791	10			61.3	196.3
				60.2	282.7
				59.3	366.8
				54.4	444.9
				47.1	480.0
				34.1	519.9
				21.3	541.3
				0.15	567.1
100.6731	10	61.4	192.8	60.8	190.8
		60.3	279.0	59.8	276.7
		58.7	358.7	58.1	355.2
		54.2	439.3	53.8	435.6
		47.7	481.8	47.4	478.4
		34.4	519.4	34.3	517.8
		21.6	542.2	21.6	541.3
		0.28	567.0	0.28	566.5
130.2819	10			59.6	193.1
				58.8	278.6
				57.8	359.8
				53.5	440.0
				46.9	481.4
				33.7	516.8
				21.1	539.0
				0.08	563.6
191.5211	10			58.7	186.4
				58.0	270.5
				57.2	351.5
				53.0	431.9
				46.6	473.4
				33.7	511.7
				21.1	534.1
				0.21	560.4
270.4168	10			56.9	178.5
				55.9	259.0
				54.9	335.3
				51.5	416.9
				45.7	461.5
				33.6	506.9
				21.1	529.3
				0.28	557.6
416.8107	10	56.4	177.2	57.6	190.5
		56.3	260.6	57.5	276.3
		54.7	334.4	56.3	354.1
		50.5	409.0	50.8	422.2
		45.0	454.5	45.0	466.0
		32.8	495.3	32.5	503.5
		20.6	518.1	20.3	525.1
		0.27	546.0	-0.05	554.3

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	11	56.4	175.5	55.4	160.0
		55.6	255.9	54.7	238.8
		55.7	339.9	54.9	321.7
		53.9	435.8	53.3	416.6
		49.5	500.0	48.8	477.9
		36.6	552.7	36.5	534.1
		22.9	575.3	23.3	562.5
		0.3	600.1	0.71	588.8
3.2832	11			54.6	166.8
				54.7	248.3
				55.0	332.5
				53.0	425.3
				49.0	490.9
				36.0	539.1
				22.7	563.4
				0.4	591.5
7.1652	11			54.5	167.4
				54.6	248.9
				54.4	329.8
				52.9	425.8
				48.6	488.2
				35.7	536.7
				22.5	561.1
				0.37	589.2
12.1165	11			54.7	170.2
				54.4	250.0
				54.5	332.7
				53.1	429.5
				48.3	487.4
				35.4	535.2
				22.4	560.9
				0.29	588.0

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	11	51.5	160.1	53.6	166.8
		51.7	237.6	54.3	249.8
		51.2	312.6	54.0	329.1
		50.1	405.5	53.4	432.3
		46.5	469.7	47.9	483.8
		35.0	528.5	35.2	531.9
		22.2	557.2	22.3	560.8
		0.29	582.0	0.29	584.9
34.5539	11			54.3	170.7
				53.6	248.8
				54.2	332.8
				51.9	422.3
				47.1	478.7
				35.0	530.7
				22.1	558.4
				0.22	583.7
60.6791	11			53.5	170.2
				53.3	249.3
				53.4	330.1
				51.3	419.0
				46.6	475.3
				34.7	528.8
				21.8	553.0
				0.16	581.4
100.6731	11	53.5	166.3	52.9	164.6
		53.6	246.8	53.2	244.7
		53.2	324.7	52.9	322.8
		51.3	414.6	50.8	410.7
		46.8	472.7	46.4	468.7
		35.0	528.5	34.8	526.0
		22.1	554.2	22.0	553.2
		0.29	582.0	0.29	581.5

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	11			52.8	170.2
				52.8	249.2
				52.5	326.8
				50.3	414.0
				46.2	474.0
				34.4	527.6
				21.7	554.2
				0.09	581.6
191.5211	11			51.5	162.2
				52.3	242.6
				51.4	316.0
				50.0	406.5
				46.3	470.5
				34.9	529.4
				21.9	552.7
				0.22	579.6
270.4168	11			51.6	160.3
				51.5	236.7
				51.5	314.3
				49.9	403.5
				45.9	463.6
				34.7	523.8
				21.9	549.9
				0.29	576.8
416.8107	11	50.5	157.0	51.1	168.2
		49.7	228.5	50.4	241.9
		49.3	300.5	50.8	320.4
		47.5	384.3	48.3	401.8
		44.1	445.4	44.1	457.4
		33.6	507.4	33.4	517.5
		21.4	536.1	21.1	545.0
		0.28	567.0	-0.04	577.4

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	12	57.4	180.3	56.7	165.7
		57.0	264.3	56.3	248.6
		56.7	346.5	56.1	329.4
		54.6	442.9	53.9	422.2
		49.8	503.0	49.3	483.0
		36.6	552.7	36.8	537.8
		23.0	578.3	23.3	564.2
		0.30	603.0	0.71	591.6
3.2832	12			56.4	174.2
				56.5	252.8
				55.7	336.8
				53.9	433.0
				49.5	496.3
				36.4	546.1
				22.9	568.6
				0.40	593.1
7.1652	12			56.3	174.8
				55.7	256.4
				55.1	334.1
				53.8	434.0
				49.1	493.7
				36.0	541.2
				22.7	566.3
				0.37	590.9
12.1165	12			56.8	178.2
				56.0	259.6
				55.6	339.9
				53.3	431.9
				48.5	490.2
				33.9	542.2
				22.9	565.0
				0.3	590.8

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	12	53.5	167.9	56.7	178.0
		53.0	245.8	55.9	259.4
		52.2	319.2	55.1	336.3
		50.9	412.6	53.2	431.5
		46.8	472.7	48.2	486.7
		35.2	531.5	35.7	538.9
		22.3	560.2	22.5	464.8
		0.29	588.0	0.30	590.7
34.5539	12			56.1	178.1
				55.5	259.5
				54.8	337.1
				52.8	430.5
				48.1	487.2
				35.3	535.2
				22.4	563.6
				0.22	588.4
60.6791	12			55.0	176.4
				—	—
				54.2	335.6
				52.1	426.8
				47.3	482.2
				34.9	531.9
				22.0	559.2
				0.16	586.1
100.6731	12	55.5	174.1	55.1	172.9
		55.0	255.0	54.5	252.9
		54.2	331.3	53.7	328.0
		52.0	421.7	51.7	419.1
		48.4	478.7	47.9	483.8
		35.2	531.5	35.1	529.4
		22.3	560.2	22.3	559.2
		0.29	585.0	0.29	584.4

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	12			54:0	175.4
				53.8	256.0
				53.3	332.3
				51.2	421.8
				46.7	478.7
				34.9	534.5
				21.8	558.4
				0.09	585.8
191.5211	12			53.4	169.7
				53.1	248.4
				52.5	322.9
				50.3	409.9
				46.5	472.4
				34.9	530.2
				22.1	558.2
				0.22	582.9
270.4168	12			52.6	165.0
				53.1	246.5
				52.6	321.1
				50.3	408.1
				46.4	468.1
				34.9	527 3
				22.1	554.3
				0.29	584.1
416.8107	12	50.5	161.7	52.7	174.8
		51.0	236.6	52.2	252.2
		50.3	307.0	51.4	324.8
		48.3	391.3	49.3	410.9
		44.7	451.5	44.8	464.4
		33.8	510.4	33.6	520.7
		21.5	539.2	24.3	550.1
		0.29	570.0	-0.03	581.3

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	13	58.4	183.4	57.8	165.4
		57.6	267.3	56.9	247.2
		56.7	346.5	56.1	325.6
		52.4	424.7	51.9	402.7
		46.5	469.7	46.1	446.4
		39.0	513.4	34.3	497.3
		21.4	536.1	21.6	517.5
		0.28	564.0	0.69	548.3
3.2832	13			22.2	65.8
				21.9	97.4
				21.5	127.2
				21.5	170.4
				20.8	205.7
				19.5	289.2
				14.9	367.4
				0.32	431.1
7.1652	13			19.0	56.9
				19.0	85.4
				18.3	109.0
				18.4	146.0
				18.0	178.6
				16.8	250.1
				13.3	328.9
				0.27	398.9
12.1165	13			18.0	56.5
				17.7	82.2
				17.9	109.5
				17.3	140.2
				16.7	168.8
				15.3	231.4
				11.5	288.7
				0.17	343.9

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	13	15.8	49.7	16.9	53.1
		15.9	73.8	17.0	78.9
		15.9	97.3	16.9	102.9
		15.7	127.4	16.5	133.7
		15.6	157.6	16.1	162.5
		14.0	211.4	14.3	215.9
		10.4	262.0	10.5	264.3
		0.16	312.0	0.16	313.7
34.5539	13			15.6	51.7
				16.0	77.0
				15.5	97.8
				15.5	128.5
				14.7	152.0
				13.0	199.3
				9.3	236.3
				0.07	279.9
60.6791	13			15.1	52.4
				14.7	73.6
				15.0	97.1
				14.7	124.7
				14.1	148.0
				12.1	189.3
				8.5	220.9
				0.00	259.7
100.6731	13	13.9	43.5	13.7	43.1
		13.3	61.5	13.1	61.0
		13.4	82.1	13.3	81.3
		13.1	106.2	13.0	105.2
		12.6	127.3	12.5	126.4
		11.0	166.1	11.0	165.7
		7.8	195.8	7.8	195.3
		0.12	234.0	0.12	233.7

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	13			12.8	48.0
				12.6	66.2
				12.4	83.9
				12.3	108.7
				11.6	126.2
				10.1	162.3
				7.1	191.2
				-0.1	226.7
191.5211	13			11.0	37.3
				10.3	50.6
				10.5	67.0
				10.2	85.3
				9.6	100.2
				8.3	129.3
				6.1	156.8
				0.03	197.0
270.4168	13			10.1	31.7
				10.2	47.1
				10.2	62.1
				9.6	77.5
				9.4	95.4
				8.1	122.6
				6.0	151.3
				0.1	198.8
416.8107	13	6.9	21.8	6.9	34.0
		6.6	30.7	6.5	43.2
		6.5	39.5	6.4	52.5
		6.0	48.5	5.8	61.2
		6.0	60.6	5.7	72.6
		5.2	78.5	4.9	90.6
		4.2	105.4	3.9	116.9
		0.09	171.0	-0.23	182.7

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	14	54.5	171.0	53.4	152.5
		54.3	251.4	53.5	231.6
		53.7	435.8	52.6	305.0
		50.1	406.5	49.7	385.6
		44.4	448.4	44.1	427.5
		32.6	492.3	—	—
		20.9	524.1	21.2	508.4
		0.29	570.0	0.70	556.1
3.2832	14			39.7	120.9
				40.1	181.6
				39.1	235.1
				38.1	305.0
				34.9	347.6
				26.6	396.6
				17.3	427.6
				0.34	472.6
7.1652	14			38.6	118.6
				38.6	176.1
				38.0	229.6
				36.9	296.3
				33.3	333.0
				25.3	379.3
				16.5	410.4
				0.30	455.6
12.1165	14			37.7	118.3
				38.1	176.2
				36.8	225.1
				34.2	277.0
				30.4	306.6
				22.5	339.6
				14.8	371.0
				0.21	413.5

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	14	35.6	111.9	37.8	118.6
		35.1	162.5	37.4	173.2
		34.3	209.7	36.4	222.3
		31.4	254.8	33.0	267.9
		28.2	284.8	29.2	294.2
		21.0	317.1	21.5	324.5
		13.9	349.4	14.1	352.9
		0.2	390.0	0.20	392.5
34.5539	14			37.3	119.7
				37.0	173.9
				34.7	214.8
				30.8	252.8
				26.6	272.0
				19.7	301.3
				12.9	326.9
				0.11	363.8
60.6791	14			37.0	121.0
				35.7	170.0
				33.2	207.8
				29.1	241.8
				25.2	260.1
				18.8	290.3
				12.2	312.8
				0.04	350.2
100.6731	14	35.6	111.9	35.3	110.8
		33.1	153.3	32.8	151.8
		31.0	189.1	30.6	186.7
		26.9	218.4	26.7	216.5
		23.4	236.3	23.3	235.3
		17.6	265.8	17.5	264.9
		11.5	289.2	11.5	289.3
		0.17	330.0	0.17	330.5

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	14			33.8	113.6
				32.2	156.9
				29.1	185.7
				25.6	216.3
				22.3	233.9
				16.7	261.7
				10.9	284.9
				0.0	322.6
191.5211	14			29.9	96.3
				28.9	136.6
				26.7	165.6
				23.5	193.0
				20.4	209.4
				15.2	233.0
				10.0	254.5
				0.08	296.2
270.4168	14			29.3	92.0
				27.2	125.8
				24.5	152.1
				22.2	180.4
				19.5	197.4
				14.9	224.8
				10.0	251.3
				0.15	294.9
416.8107	14	24.8	77.7	25.2	91.0
		23.2	107.3	23.6	121.7
		21.4	130.7	21.5	144.2
		19.1	154.7	19.2	168.8
		17.1	172.7	17.1	186.5
		13.2	199.3	13.0	211.9
		9.0	255.9	8.7	237.5
		0.14	273.0	-0.18	284.5

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	15	62.4	195.9	61.1	181.1
		62.3	288.9	61.5	273.7
		61.7	376.9	60.8	359.1
		55.7	452.0	55.1	433.6
		47.7	481.8	47.5	463.4
		33.6	507.4	33.8	494.9
		21.0	527.1	21.3	515.8
		0.27	549.0	0.68	538.9
3.2832	15			59.7	185.0
				60.3	277.1
				59.4	360.1
				54.8	441.0
				46.5	466.5
				32.8	491.7
				20.6	511.5
				0.37	538.3
7.1652	15			59.7	185.5
				60.2	277.6
				58.8	357.3
				54.3	438.3
				46.2	463.9
				32.6	489.3
				20.4	509.1
				0.34	536.0
12.1165	15			59.9	188.1
				60.5	280.8
				58.9	360.0
				54.1	439.1
				45.8	462.1
				32.4	489.0
				20.3	508.8
				0.27	534.4

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	15	56.4	177.2	59.8	187.9
		55.6	258.1	59.7	277.1
		55.2	337.4	58.3	356.4
		51.3	415.6	53.7	435.4
		44.7	415.5	45.7	461.8
		32.2	486.2	32.4	488.8
		20.2	506.0	20.3	508.7
		0.27	534.0	0.27	534.5
34.5539	15			59.4	188.4
				60.0	280.3
				58.1	356.6
				53.3	434.4
				45.4	460.4
				32.0	486.3
				20.0	506.2
				0.20	533.1
60.6791	15			59.1	189.0
				58.9	277.1
				57.8	356.8
				52.4	429.0
				44.5	453.5
				31.7	482.8
				19.8	503.7
				0.13	530.5
100.6731	15	58.4	183.4	59.0	185.3
		58.3	270.4	59.0	273.6
		57.2	349.6	58.0	354.3
		52.0	421.7	52.4	425.3
		44.7	451.5	45.0	454.1
		32.0	483.2	32.1	484.2
		20.0	503.0	20.1	503.6
		0.27	534.0	0.27	534.2

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	15			58.0	187.3
				57.7	273.3
				56.5	351.2
				51.6	424.5
				44.2	453.0
				31.5	483.5
				19.6	502.0
				0.06	532.7
191.5211	15			56.9	180.5
				56.6	264.3
				—	—
				50.0	408.0
				43.4	440.2
				31.3	474.8
				19.7	498.4
				0.20	528.3
270.4168	15			56.7	178.0
				56.4	261.7
				55.7	340.3
				51.8	420.1
				43.9	443.5
				31.6	476.8
				19.8	497.9
				0.26	528.3
416.8107	15	54.5	158.6	55.8	183.6
		54.3	233.5	56.4	270.6
		53.2	304.0	54.5	342.6
		49.0	385.3	49.9	414.6
		42.6	427.2	52.8	442.4
		30.8	468.1	30.6	474.2
		19.4	494.0	19.2	497.0
		0.20	525.0	-0.06	527.0

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	16	64.4	202.7	63.4	187.4
		63.6	295.0	62.7	277.8
		62.7	383.6	62.2	366.9
		56.9	461.7	56.0	440.3
		48.9	493.9	48.7	476.5
		34.6	522.5	34.8	507.9
		21.5	539.2	21.8	526.2
		0.28	561.0	0.69	549.0
3.2832	16			62.3	193.1
				62.0	284.3
				60.8	369.0
				55.1	444.1
				47.4	475.3
				33.6	503.4
				21.0	521.8
				0.37	544.6
7.1652	16			61.1	190.4
				61.9	385.0
				62.2	366.4
				54.7	441.5
				47.1	472.8
				33.4	501.1
				20.7	516.5
				0.34	545.4
12.1165	16			61.8	194.5
				61.6	285.6
				60.0	367.5
				54.5	442.5
				46.9	473.8
				33.2	500.9
				20.7	518.3
				0.27	545.4

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	16	57.4	180.8	61.7	194.3
		57.0	264.2	61.5	285.2
		56.2	344.0	60.0	367.0
		52.4	425.2	54.4	442.0
		45.6	460.5	46.6	470.3
		32.8	495.2	33.2	500.8
		20.6	518.0	20.7	518.2
		0.27	543.0	0.27	545.3
34.5539	16			60.9	193.7
				60.9	284.8
				59.5	366.1
				53.7	438.2
				46.0	466.7
				32.8	498.4
				20.3	514.0
				0.20	543.9
60.6791	16			60.9	195.8
				59.7	281.0
				58.2	360.6
				52.5	430.7
				45.2	461.3
				32.2	491.8
				20.1	511.8
				0.14	537.7
100.6731	16	60.4	190.2	61.2	192.7
		59.6	276.5	60.5	280.5
		58.2	356.2	58.8	359.8
		52.7	428.2	53.2	432.0
		45.6	460.5	46.0	464.6
		32.6	492.2	32.7	493.4
		20.4	512.0	20.4	512.7
		0.27	540.0	0.27	541.5
130.2819	16	58.4	184.0	59.0	191.7
		57.6	267.3	58.3	276.6
		56.7	347.1	58.0	361.2
		51.6	419.1	52.0	429.4
		45.0	454.4	45.2	464.1
		32.2	486.2	32.1	492.3
		20.2	506.0	20.0	511.8
		0.26	534.0	0.07	541.8
191.5211	16			57.5	183.1
				58.2	272.0
				56.3	346.9
				52.6	429.8
				45.3	459.8
				32.1	487.4
				20.0	506.1
				0.20	539.5
270.4168	16			57.4	180.7
				56.9	263.9
				56.2	345.2
				51.3	416.9
				44.7	451.0
				31.9	482.0
				20.1	504.0
				0.27	535.7
416.8107	16	54.5	171.5	56.3	187.1
		54.3	252.0	56.5	272.3
		53.2	325.8	55.1	347.7
		49.4	400.9	49.8	415.2
		42.9	433.2	43.0	446.0
		31.0	468.1	30.8	478.8
		19.6	491.0	19.2	498.7
		0.26	522.0	-0.07	531.8

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	17	68.3	213.8	67.2	197.5
		68.2	315.8	67.3	298.2
		66.7	406.7	65.5	385.5
		59.5	481.8	58.9	462.1
		50.7	512.1	50.4	493.2
		35.8	540.6	36.1	526.8
		22.2	557.2	22.6	545.2
		0.29	576.0	0.70	563.2
3.2832	17			67.9	209.4
				66.8	305.9
				65.3	394.8
				58.2	467.7
				49.4	495.4
				35.5	529.5
				22.2	550.9
				0.38	564.2
7.1652	17			67.8	210.1
				66.7	306.5
				65.2	395.4
				57.8	465.3
				49.1	493.0
				35.1	527.2
				22.0	548.7
				0.35	562.1
12.1165	17			67.0	209.6
				67.3	311.5
				64.8	395.1
				57.7	467.7
				49.2	497.1
				35.0	529.0
				21.8	547.5
				0.28	562.8

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	17	63.4	198.3	66.9	209.4
		62.9	291.3	66.5	308.0
		61.7	376.3	64.2	391.6
		56.5	457.5	57.7	467.3
		48.6	490.9	48.9	493.8
		34.6	522.5	34.8	525.9
		21.6	542.2	21.8	547.5
		0.28	564.0	0.28	556.8
34.5539	17			66.5	210.2
				66.4	309.7
				64.4	395.3
				56.8	462.4
				48.6	493.3
				34.6	524.7
				21.6	546.3
				0.21	562.8
60.6791	17			66.0	210.6
				65.8	308.8
				63.7	386.7
				56.5	462.4
				47.8	487.3
				34.4	524.6
				21.6	548.2
				0.15	561.7
100.6731	17	66.3	201.0	65.7	205.5
		65.6	303.6	65.0	301.1
		64.2	391.5	63.8	389.2
		57.2	463.6	56.9	460.5
		48.9	493.9	48.6	491.1
		34.6	522.5	34.6	522.5
		21.6	542.2	21.6	541.6
		0.28	561.0	0.28	560.6

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	17			64.9	209.5
				64.6	305.5
				62.6	388.6
				56.2	462.2
				48.1	493.5
				34.1	523.9
				21.1	540.2
				0.08	560.9
191.5211	17			63.3	200.1
				63.6	296.5
				61.9	379.7
				55.9	455.5
				48.6	493.8
				34.4	522.7
				21.5	544.0
				0.21	560.0
270.4168	17			63.8	199.7
				63.9	295.7
				61.9	377.4
				56.0	453.6
				48.5	489.6
				34.4	519.5
				21.4	538.2
				0.28	558.7
416.8107	17	62.4	195.2	64.0	210.3
		61.6	285.2	63.1	302.6
		59.7	364.2	60.9	382.4
		54.2	439.3	54.3	451.2
		46.8	472.7	46.1	478.2
		33.4	504.3	33.3	516.9
		20.9	524.1	20.7	537.2
		0.27	546.0	-0.05	559.0

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	18	67.3	212.1	66.4	196.3
		66.9	310.4	65.8	291.7
		66.2	405.0	65.8	388.6
		59.5	482.4	59.0	463.1
		50.7	512.1	50.5	494.0
		35.6	537.6	35.9	523.8
		22.1	554.2	22.5	541.9
		0.29	573.0	0.70	560.2
3.2832	18			66.5	206.4
				65.9	302.4
				66.5	403.7
				59.4	477.8
				49.5	495.6
				35.2	526.4
				21.8	541.0
				0.38	563.5
7.1652	18			66.4	207.1
				65.8	503.0
				65.9	401.0
				58.9	475.1
				49.1	493.3
				34.9	524.2
				21.6	538.9
				0.35	561.4
12.1165	18			66.5	209.4
				65.6	304.5
				65.7	402.2
				58.6	474.9
				48.8	493.2
				34.7	524.2
				21.5	538.8
				0.28	560.2

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	18	62.4	196.5	65.4	205.9
		62.3	288.8	65.0	301.7
		60.7	371.5	65.1	398.6
		55.4	449.0	57.9	469.8
		48.0	484.8	48.5	489.9
		34.4	519.4	34.7	524.0
		21.4	536.1	21.5	538.8
		0.28	558.0	0.28	560.2
34.5539	18			66.2	210.5
				64.8	303.0
				64.6	397.6
				57.5	468.7
				48.0	487.5
				34.2	518.7
				21.2	536.5
				0.21	559.1
60.6791	18			65.3	209.8
				64.4	303.1
				63.6	393.4
				56.2	460.8
				47.4	483.2
				34.1	519.8
				21.1	535.6
				0.15	555.8
100.6731	18	65.4	205.8	64.9	204.3
		64.9	301.1	64.3	298.1
		62.2	380.6	61.6	376.9
		55.7	452.0	55.3	448.4
		48.0	484.8	47.8	482.7
		34.2	516.4	34.2	516.5
		21.4	536.1	21.3	535.5
		0.28	558.0	0.28	557.6

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	18			64.8	210.3
				63.9	303.2
				61.7	384.6
				54.7	451.0
				47.0	482.7
				33.8	519.0
				20.9	535.4
				0.07	554.9
191.5211	18			64.7	205.9
				62.7	302.0
				61.4	377.9
				54.8	446.9
				47.3	480.4
				33.8	513.5
				21.1	532.5
				0.21	555.5
270.4168	18			63.3	199.4
				62.8	291.3
				60.6	371.0
				54.3	444.0
				47.2	476.3
				33.9	511.6
				21.3	533.5
				0.28	552.7
416.8107	18	61.4	193.4	62.6	207.2
		60.3	279.6	61.6	296.3
		57.7	353.2	59.8	376.6
		52.4	424.7	53.3	439.3
		45.6	460.6	45.4	470.3
		32.8	495.3	32.7	507.8
		20.6	518.1	20.4	528.6
		0.27	540.0	-0.05	550.1

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	20	70.3	221.4	69.1	205.0
		70.2	325.7	68.6	304.8
		68.2	417.1	66.9	395.7
		60.2	488.4	59.8	470.5
		51.0	515.1	50.9	498.3
		35.8	540.6	36.1	526.7
		22.2	557.2	22.6	545.0
		0.29	576.0	0.70	563.1
3.2832	20			68.7	212.5
				68.0	311.4
				66.5	402.3
				58.9	473.0
				50.2	502.5
				35.5	530.3
				22.0	546.1
				0.41	563.1
7.1652	20			68.6	214.0
				67.9	312.9
				65.9	400.7
				58.4	471.4
				49.9	501.0
				35.2	528.9
				21.9	544.8
				0.35	561.7
12.1165	20			67.8	213.6
				67.4	312.7
				64.7	396.1
				57.6	467.0
				49.2	496.7
				35.0	527.7
				21.7	543.6
				0.28	560.6

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	20	66.3	209.0	67.7	213.3
		65.6	304.2	66.6	309.2
		63.7	389.7	64.1	392.6
		56.9	461.1	57.2	463.6
		48.9	493.9	49.2	496.5
		34.6	522.5	34.7	524.5
		21.6	542.2	21.7	543.5
		0.28	561.0	0.28	560.7
34.5539	20			67.3	214.2
				66.3	309.9
				63.6	391.5
				56.7	462.6
				48.5	492.3
				34.5	523.5
				21.4	539.4
				0.21	559.5
60.6791	20			67.4	216.4
				66.1	311.1
				62.9	389.4
				55.7	456.5
				48.0	490.2
				34.0	519.0
				21.1	537.2
				0.15	558.4
100.6731	20	67.3	212.1	66.8	210.5
		66.2	307.3	65.6	304.3
		63.2	386.7	62.6	383.2
		56.1	455.1	55.8	452.6
		48.3	487.8	48.3	487.3
		34.4	519.4	34.4	519.8
		21.5	539.1	21.5	539.7
		0.28	558.0	0.28	558.7

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	20			66.1	214.4
				65.2	308.7
				61.8	385.0
				55.2	455.0
				47.5	487.3
				33.3	519.5
				20.9	536.1
				0.08	559.0
191.5211	20			65.0	206.9
				64.1	299.8
				61.4	377.9
				54.7	446.2
				47.6	482.9
				33.9	514.7
				21.1	534.1
				0.21	559.6
270.4168	20			64.9	204.5
				63.7	295.4
				60.8	372.3
				55.1	446.3
				47.6	480.3
				34.1	514.7
				21.3	534.2
				0.28	559.9
416.8107	20	64.4	202.7	64.6	213.3
		62.9	291.9	63.0	302.7
		59.7	365.4	59.4	374.4
		53.5	433.8	53.3	443.5
		46.5	469.7	46.4	480.3
		33.4	504.3	33.2	513.3
		20.9	524.1	20.6	534.5
		0.27	546.0	0.05	554.6

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	21	70.3	222.1	68.6	204.0
		69.53	323.3	68.0	302.7
		67.7	414.7	67.0	396.5
		59.5	482.9	58.7	461.7
		50.4	509.0	50.4	493.0
		35.6	537.5	35.9	524.0
		22.0	555.1	22.3	537.8
		0.28	570.0	0.69	557.6
3.2832	21			67.7	210.9
				67.7	311.8
				65.9	400.3
				58.4	470.7
				49.5	496.5
				35.0	525.1
				21.7	538.6
				0.37	560.3
7.1652	21			67.6	211.6
				67.0	309.3
				65.3	397.8
				57.6	465.2
				48.9	491.1
				34.8	522.9
				21.5	536.4
				0.35	555.2
12.1165	21			67.0	211.8
				67.0	311.5
				65.1	398.8
				57.3	464.9
				48.6	490.9
				34.4	519.7
				21.4	536.3
				0.28	557.1

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	21	65.3	206.4	66.9	211.5
		64.9	301.7	66.9	311.1
		62.7	384.2	64.5	395.2
		56.1	455.6	56.8	461.4
		48.0	484.8	48.3	487.6
		34.2	516.4	34.4	519.6
		21.4	536.1	21.4	536.3
		0.27	555.0	0.28	554.0
34.5539	21			66.4	211.9
				66.3	310.6
				63.5	391.6
				56.2	459.1
				47.8	485.4
				34.1	517.4
				21.0	531.1
				0.21	553.0
60.6791	21			66.1	213.0
				65.6	309.5
				63.3	392.6
				55.2	452.6
				47.6	486.0
				33.6	513.3
				20.8	529.0
				0.15	551.8
100.6731	21	66.3	209.6	65.7	207.5
		65.6	304.8	64.9	301.8
		63.2	387.3	62.8	384.8
		55.7	452.5	55.3	449.1
		48.0	484.8	47.9	483.7
		34.0	513.4	34.0	513.5
		21.2	533.1	21.2	532.5
		0.27	555.0	0.28	554.7

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	21			65.9	214.5
				64.5	306.4
				62.1	387.4
				55.1	454.4
				47.2	483.9
				33.5	513.6
				20.8	533.1
				0.08	554.8
191.5211	21			65.3	208.4
				63.6	298.2
				59.4	366.7
				55.0	448.7
				46.7	474.4
				33.8	512.8
				20.9	528.0
				0.21	551.8
270.4168	21			64.7	204.5
				63.9	297.3
				61.1	374.7
				54.9	445.9
				47.4	479.2
				33.9	512.1
				21.2	531.1
				0.28	552.5
416.8107	21	63.4	200.2	63.8	211.5
		62.4	289.4	62.6	301.6
		59.2	362.9	59.9	378.4
		53.1	431.3	52.9	441.1
		46.2	466.6	46.0	476.7
		33.0	498.3	32.8	508.5
		20.6	518.0	20.2	525.2
		0.27	543.0	-0.06	551.1

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	22	71.3	224.5	69.9	208.0
		70.9	328.7	69.6	332.0
		69.2	423.2	67.8	401.5
		60.2	489.0	59.7	470.3
		51.0	515.1	50.8	497.8
		35.6	537.5	35.8	523.8
		22.1	554.2	22.5	542.8
		0.28	573.0	0.70	561.2
3.2832	22			69.4	215.5
				69.2	317.9
				67.0	406.9
				59.1	476.5
				50.0	501.3
				35.0	524.5
				21.8	542.4
				0.38	560.5
7.1652	22			68.3	213.0
				68.4	315.4
				66.4	404.3
				58.3	471.0
				49.7	498.9
				34.8	522.2
				21.7	540.1
				0.35	558.3
12.1165	22			68.6	216.2
				68.0	315.3
				66.0	403.9
				58.0	470.6
				49.3	497.5
				34.6	522.1
				21.5	538.8
				0.28	557.1

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	22	65.3	205.8	67.5	212.7
		64.9	301.1	67.2	311.7
		62.7	383.6	64.4	394.0
		56.1	455.6	56.8	461.0
		48.0	484.8	48.3	488.1
		34.2	516.4	34.4	518.9
		21.4	536.1	21.5	538.8
		0.27	555.0	0.28	554.0
34.5539	22			68.0	216.2
				67.5	315.2
				65.2	401.0
				57.3	467.9
				48.6	493.0
				34.2	519.6
				21.3	537.6
				0.21	555.9
60.6791	22			67.4	216.2
				66.9	314.6
				64.6	399.4
				56.5	42.9
				48.2	491.1
				33.9	516.5
				21.0	534.3
				0.15	554.6
100.6731	22	67.3	212.0	66.7	209.9
		66.9	310.3	66.2	307.2
		65.2	398.8	64.5	395.0
		57.2	464.7	56.8	461.4
		48.6	490.8	48.4	488.8
		34.4	519.4	34.3	518.5
		21.4	536.1	21.3	535.6
		0.27	555.0	0.28	554.7

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	22			67.1	217.2
				66.4	314.1
				64.1	398.8
				56.5	465.4
				47.9	491.5
				33.9	519.3
				21.0	536.8
				0.07	554.5
191.5211	22			65.1	207.2
				65.5	306.0
				33.4	390.2
				57.0	465.1
				48.4	490.9
				34.2	518.7
				21.2	534.9
				0.21	552.8
270.4168	22			65.6	206.5
				65.0	301.8
				63.2	386.5
				56.7	460.0
				48.3	488.1
				34.1	514.9
				21.3	535.1
				0.28	555.5
416.8107	22	64.4	202.7	64.9	213.9
		63.6	294.9	64.2	308.0
		61.7	377.5	61.8	388.8
		55.0	446.4	54.7	455.4
		47.1	475.7	46.9	485.8
		33.4	504.3	33.1	513.4
		20.8	521.0	20.5	530.2
		0.27	543.0	-0.06	550.7

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	23	68.3	215.8	67.7	201.2
		68.2	317.1	67.0	298.2
		66.7	407.9	65.4	386.4
		59.5	482.9	59.1	464.8
		50.7	512.0	50.5	494.7
		35.6	537.5	35.8	523.3
		22.1	554.2	22.4	541.1
		0.28	576.0	0.70	564.6
3.2832	23			67.3	207.8
				67.0	306.6
				65.6	396.1
				58.6	470.4
				49.5	494.6
				35.2	525.0
				21.9	542.4
				0.38	559.5
7.1652	23			67.2	210.2
				66.2	305.8
				65.0	395.2
				58.2	499.7
				49.2	493.9
				34.9	524.4
				21.7	541.9
				0.35	559.1
12.1165	23			67.6	213.6
				66.3	308.5
				64.2	393.1
				57.4	466.3
				49.0	494.8
				34.7	523.2
				21.5	540.8
				0.28	562.1

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	23	63.4	200.2	66.5	210.0
		62.9	292.5	65.6	304.9
		61.7	377.5	64.2	392.6
		55.7	452.5	57.0	462.8
		48.3	487.8	48.7	491.5
		34.4	519.4	34.6	523.1
		21.5	539.1	21.5	540.7
		0.27	558.0	0.28	559.0
34.5539	23			65.9	210.3
				65.3	305.8
				63.2	388.8
				56.4	460.4
				48.1	488.0
				34.4	521.9
				21.4	539.5
				0.21	559.8
60.6791	23			66.3	213.6
				64.7	305.3
				62.5	387.3
				55.8	457.4
				47.6	485.5
				34.0	518.9
				21.1	537.5
				0.15	555.7
100.6731	23	65.3	206.4	65.0	205.4
		64.9	301.7	64.5	299.9
		63.2	386.6	62.6	383.0
		56.5	458.6	56.2	456.5
		48.3	487.8	48.0	485.2
		34.4	519.4	34.3	518.5
		21.4	536.1	21.3	535.6
		0.27	558.0	0.28	557.6

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	23			63.9	208.0
				63.1	299.6
				61.1	380.6
				54.8	451.7
				47.3	485.5
				33.8	519.4
				20.9	534.2
				0.08	557.3
191.5211	23			64.4	205.5
				62.9	294.8
				61.2	377.0
				55.4	452.4
				47.9	486.4
				34.0	516.5
				21.3	536.9
				0.21	554.2
270.4168	23			63.4	200.3
				63.2	294.0
				61.1	374.1
				55.5	450.6
				48.1	486.0
				34.1	514.9
				21.3	534.0
				0.28	555.6
416.8107	23	61.4	193.9	62.7	208.2
		60.9	283.3	61.9	298.3
		58.7	359.2	59.5	375.0
		53.5	434.3	53.8	488.2
		46.5	469.6	46.0	477.2
		33.4	504.3	33.3	516.0
		20.8	521.0	20.5	530.6
		0.27	546.0	-0.06	554.9

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	24	69.3	219.7	68.0	202.2
		68.9	320.9	67.8	302.1
		67.2	412.3	65.9	389.9
		59.1	480.5	58.3	458.9
		50.4	509.0	50.3	491.9
		35.4	534.5	35.6	519.4
		22.0	551.1	22.3	537.5
		0.23	573.0	0.69	555.9
3.2832	24			67.6	211.0
				67.6	311.7
				65.8	400.7
				58.3	470.0
				49.5	496.1
				35.0	523.9
				21.7	539.7
				0.38	562.2
7.1652	24			67.5	211.7
				67.5	312.4
				65.2	398.1
				58.2	470.6
				49.2	493.7
				34.8	521.7
				21.6	537.6
				0.35	560.1
12.1165	24			67.2	213.0
				67.1	312.5
				65.0	399.2
				58.0	471.6
				49.0	494.7
				34.5	520.6
				21.4	537.6
				0.28	560.1

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	24	64.4	204.0	67.1	212.8
		63.6	296.2	66.3	308.9
		62.2	381.8	64.4	395.6
		56.1	456.1	57.6	468.1
		48.3	487.8	49.0	494.4
		34.4	519.4	34.5	520.5
		21.4	536.1	21.4	537.5
		0.27	558.0	0.28	560.1
34.5539	24			66.2	212.1
				65.9	309.4
				64.0	395.1
				56.8	464.6
				48.4	491.2
				34.2	519.5
				21.2	535.4
				0.21	558.0
60.6791	24			65.5	211.7
				65.6	309.9
				63.3	393.5
				56.1	460.6
				48.0	489.6
				33.8	516.5
				21.0	533.4
				0.15	556.9
100.6731	24	66.3	210.2	65.7	208.2
		64.9	302.4	64.5	300.4
		63.2	387.9	62.6	384.2
		56.5	459.2	56.1	455.7
		48.3	487.8	48.1	485.4
		34.4	519.4	34.3	518.4
		21.4	536.1	21.3	535.6
		0.27	558.0	0.28	557.7

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	24			64.9	212.2
				64.4	306.6
				62.1	388.3
				55.5	458.3
				47.9	491.4
				33.7	516.9
				21.0	537.4
				0.08	559.1
191.5211	24			64.1	205.5
				63.8	299.7
				61.7	381.5
				56.0	457.5
				48.1	488.2
				34.0	515.8
				21.1	534.1
				0.21	556.2
270.4168	24			63.7	201.9
				63.1	294.1
				60.6	372.3
				55.3	449.5
				47.9	483.7
				34.1	515.0
				21.2	534.0
				0.28	555.6
416.8107	24	61.4	194.5	62.2	207.7
		60.9	283.9	61.8	299.0
		59.2	363.5	59.2	374.8
		53.5	434.8	53.5	447.3
		46.2	466.6	46.1	478.5
		33.2	501.3	32.9	510.8
		20.8	521.0	20.4	529.8
		0.27	543.0	-0.06	552.4

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	25	70.3	221.4	69.1	201.2
		70.2	325.4	69.5	306.0
		67.7	414.1	66.5	388.9
		58.4	473.8	57.4	447.3
		49.2	496.9	49.0	474.9
		34.4	519.4	34.6	501.1
		21.4	536.1	21.7	519.1
		0.28	558.1	0.69	541.6
3.2832	25			59.7	181.0
				57.7	263.9
				52.7	318.5
				44.1	353.3
				36.8	366.9
				26.2	391.7
				16.4	404.1
				0.31	425.3
7.1652	25			57.5	174.5
				55.6	255.9
				49.1	297.3
				40.6	326.3
				33.7	337.5
				24.0	359.3
				15.1	375.0
				0.27	396.4
12.1165	25			54.4	171.4
				49.6	230.5
				41.9	256.3
				34.2	277.3
				28.5	287.3
				20.4	307.7
				12.8	320.1
				0.17	339.6

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	25	49.5	155.9	52.3	164.6
		44.4	206.3	47.4	220.3
		38.3	234.4	39.8	243.4
		32.2	261.2	33.0	267.7
		27.0	272.7	27.2	274.9
		19.4	292.9	19.6	295.5
		12.2	307.2	12.3	308.0
		0.17	330.0	0.17	330.6
34.5539	25			47.9	153.7
				43.5	205.0
				37.0	229.4
				30.5	250.4
				25.5	260.4
				18.5	282.2
				11.6	295.5
				0.09	317.5
60.6791	25			45.1	147.3
				40.9	195.4
				34.4	216.2
				28.7	238.8
				24.3	251.8
				17.7	273.9
				11.3	290.7
				0.03	313.9
100.6731	25	41.6	131.0	41.2	129.7
		37.1	172.5	36.9	171.6
		32.3	197.9	32.0	196.1
		27.7	224.8	27.4	222.4
		23.7	239.4	23.6	238.3
		17.4	262.7	17.4	262.2
		11.3	283.1	11.3	282.8
		0.16	312.0	0.16	311.8

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	25			39.1	131.1
				34.8	170.2
				30.6	196.1
				26.1	221.2
				22.5	236.4
				16.5	258.9
				10.6	278.7
				-0.05	310.5
191.5211	25			34.4	111.2
				31.0	147.0
				28.1	174.7
				24.1	198.8
				20.6	211.2
				15.5	237.0
				10.3	261.6
				0.08	300.8
270.4168	25			31.4	99.0
				28.5	132.5
				25.4	155.4
				22.4	181.5
				20.0	201.9
				15.3	230.7
				10.2	256.5
				0.15	303.3
416.8107	25	24.8	78.0	25.2	92.3
		23.2	107.8	23.9	124.4
		20.9	127.9	21.0	142.4
		19.1	154.9	19.0	165.6
		17.1	172.7	16.7	183.8
		13.6	205.4	13.4	218.3
		9.4	234.9	9.0	246.6
		0.14	288.0	-0.17	300.0

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	26	72.3	229.1	70.9	208.2
		71.5	334.0	70.3	311.4
		68.7	421.6	67.6	397.4
		58.4	475.0	57.6	450.1
		49.2	501.8	49.1	481.1
		34.6	525.9	34.8	507.7
		21.5	539.2	21.9	523.2
		0.28	561.0	0.69	546.2
3.2832	26			60.3	187.2
				58.7	269.8
				53.0	321.0
				43.8	351.6
				36.9	372.0
				26.1	391.7
				16.4	406.2
				0.32	429.4
7.1652	26			58.2	181.7
				55.1	254.4
				49.3	299.7
				40.3	324.8
				34.2	345.1
				23.9	359.4
				15.1	374.2
				0.27	397.5
12.1165	26			54.2	171.8
				48.9	228.2
				42.5	260.8
				33.9	276.0
				28.7	292.3
				20.2	307.1
				12.8	320.0
				0.17	342.8

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	26	49.5	156.9	52.0	165.0
		44.4	207.2	46.7	218.2
		38.3	235.2	40.3	247.6
		32.2	261.9	32.7	266.5
		27.0	275.4	27.4	279.7
		19.4	294.9	19.4	294.9
		12.4	310.2	12.4	310.9
		0.17	330.0	0.17	330.8
34.5539	26			47.6	153.5
				43.0	203.8
				37.2	231.0
				30.2	249.1
				25.8	266.1
				18.3	282.2
				11.6	294.7
				0.09	321.3
60.6791	26			44.9	147.6
				39.6	190.2
				34.8	215.4
				28.6	238.3
				24.5	255.5
				17.7	275.0
				11.3	290.6
				0.03	317.0
100.6731	26	40.6	128.7	40.2	127.4
		36.4	170.1	36.1	168.4
		32.3	198.6	32.1	197.1
		27.3	222.3	27.1	220.5
		23.7	241.7	23.6	240.7
		17.4	264.5	17.4	264.0
		11.3	283.1	11.3	282.8
		0.16	312.0	0.16	311.9

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	26			37.9	128.0
				34.3	168.2
				30.2	194.2
				25.8	219.1
				22.2	236.0
				16.4	260.0
				10.6	279.2
				-0.05	314.0
191.5211	26			33.1	107.9
				30.5	145.8
				27.7	173.7
				23.6	195.2
				20.3	210.0
				15.2	234.9
				10.2	261.1
				0.08	304.1
270.4168	26			29.4	93.1
				27.3	127.4
				25.1	154.3
				21.7	176.4
				19.4	198.3
				15.1	228.8
				10.2	257.1
				0.15	306.2
416.8107	26	23.8	75.3	24.0	89.0
		21.9	102.1	22.2	116.8
		19.9	122.2	20.1	137.5
		18.3	149.2	18.1	161.6
		16.5	168.3	16.2	180.5
		13.2	200.6	12.9	212.1
		9.24	231.9	8.9	243.8
		0.15	291.0	-0.17	303.6

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	27	68.3	217.9	67.6	202.7
		67.6	316.8	66.7	299.3
		66.2	408.3	65.2	388.3
		58.7	479.2	58.4	461.6
		49.8	508.0	49.4	488.6
		35.2	535.0	34.9	512.4
		21.8	550.4	22.2	537.0
		0.29	570.0	0.69	557.3
3.2832	27			67.1	210.8
				66.2	307.1
				64.5	394.6
				57.8	468.0
				49.1	496.7
				34.8	524.4
				21.6	538.9
				0.34	559.2
7.1652	27			66.0	208.3
				65.4	304.5
				63.9	392.0
				57.4	465.6
				48.7	494.3
				34.5	522.1
				21.4	536.7
				0.35	557.0
12.1165	27			66.0	210.5
				65.9	308.9
				64.0	394.9
				57.3	467.1
				48.6	496.0
				34.6	526.2
				21.4	539.6
				0.28	558.9

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	27	62.4	199.0	64.9	207.0
		62.3	292.0	65.2	305.8
		61.2	377.6	63.4	391.3
		55.7	454.8	56.8	463.6
		48.0	489.6	48.3	492.5
		34.2	519.8	34.4	523.0
		21.4	538.3	21.4	539.5
		0.28	558.0	0.28	558.8
34.5539	27			65.7	211.7
				65.1	307.8
				63.2	392.0
				56.8	465.7
				48.2	494.5
				34.0	519.6
				21.2	537.4
				0.21	557.8
60.6791	27			64.9	211.1
				64.3	305.6
				62.4	389.5
				55.5	457.6
				47.2	486.3
				33.7	518.0
				21.0	536.0
				0.15	556.5
100.6731	27	64.4	205.3	64.2	204.8
		64.2	301.3	63.8	296.1
		63.2	389.8	62.8	387.5
		56.5	460.9	56.2	458.9
		48.6	495.7	48.2	492.0
		34.4	522.9	34.3	521.8
		21.4	538.3	21.3	537.7
		0.28	555.0	0.28	557.6
130.2819	27			63.9	210.1
				63.0	302.1
				61.9	388.6
				55.7	461.8
				47.7	493.9
				33.9	523.1
				20.9	538.2
				0.08	557.8
191.5211	27			63.4	204.4
				62.3	294.5
				61.6	382.4
				56.7	464.8
				48.5	497.6
				34.7	530.3
				21.2	538.2
				0.21	559.5
270.4168	27			62.7	200.0
				61.8	289.8
				61.1	376.9
				56.1	458.0
				48.4	493.8
				34.3	521.6
				21.3	536.2
				0.28	558.7
416.8107	27	60.4	192.7	61.5	206.2
		60.3	282.6	61.3	297.9
		59.2	365.3	59.7	379.6
		54.2	442.6	54.6	457.4
		46.8	477.4	46.5	486.5
		33.4	507.7	33.1	516.7
		20.8	526.2	20.6	535.5
		0.27	546.0	-0.06	555.9

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	28	68.3	218.6	66.7	200.6
		67.6	316.8	66.5	298.5
		65.7	405.2	64.9	386.5
		58.4	476.2	57.6	455.0
		49.8	508.0	49.4	487.9
		35.2	535.0	35.4	520.5
		21.8	550.4	22.2	537.1
		0.29	570.0	0.69	557.5
3.2832	28			66.8	210.6
				66.2	307.1
				64.1	392.2
				67.6	466.6
				48.9	495.1
				34.8	523.9
				21.6	539.0
				0.38	558.3
7.1652	28			65.7	208.0
				65.4	303.6
				63.5	389.6
				57.2	464.1
				48.3	489.6
				34.5	521.7
				21.5	536.8
				0.35	556.1
12.1165	28			66.3	212.1
				65.5	307.3
				63.3	390.7
				56.8	463.8
				48.3	492.4
				34.5	524.6
				21.3	536.7
				0.28	555.0

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	28	62.4	199.6	65.2	208.5
		62.3	292.0	64.8	303.7
		61.2	377.6	63.3	390.3
		55.4	451.8	56.8	463.1
		48.0	489.6	48.3	492.1
		34.2	519.8	34.5	524.5
		21.2	535.2	21.3	536.7
		0.28	555.0	0.28	555.0
34.5539	28			65.4	211.4
				65.1	307.7
				62.8	389.5
				56.6	464.1
				47.8	489.8
				34.2	522.2
				21.1	534.4
				0.21	556.9
60.6791	28			64.4	210.1
				64.0	304.2
				62.5	390.0
				55.4	456.3
				47.0	484.7
				33.6	515.7
				21.0	535.3
				0.15	555.7
100.6731	28	64.4	205.9	63.7	203.9
		64.3	301.3	63.7	298.9
		62.7	386.8	62.3	384.4
		56.1	457.9	55.7	454.3
		48.3	492.7	48.0	489.8
		34.2	519.8	34.1	518.8
		21.4	538.3	21.3	537.7
		0.28	558.0	0.28	557.7

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	28			63.8	210.3
				62.7	300.5
				61.5	386.3
				55.2	457.9
				47.5	492.2
				33.7	520.0
				20.8	535.2
				0.07	554.8
191.5211	28			62.4	201.8
				61.8	292.2
				60.8	377.5
				55.7	457.3
				48.3	495.4
				34.0	520.3
				21.1	536.3
				0.21	556.1
270.4168	28			62.5	199.9
				62.2	291.6
				61.3	378.1
				55.4	451.8
				48.2	491.5
				34.1	518.6
				21.3	536.3
				0.28	555.6
416.8107	28	61.4	196.4	62.3	209.2
		60.9	285.8	62.0	301.3
		59.2	365.3	60.0	381.0
		53.9	439.5	53.9	451.0
		46.5	474.3	45.9	480.7
		33.2	504.6	33.0	515.0
		20.8	525.2	20.5	532.6
		0.27	546.0	-0.05	555.0

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	29	65.4	208.5	64.0	191.3
		64.9	303.7	63.6	284.3
		63.7	392.3	62.9	373.6
		57.6	470.1	57.0	450.6
		49.5	504.9	50.3	497.7
		35.0	532.0	36.0	529.8
		21.8	550.4	22.2	537.0
		0.29	570.0	0.69	557.8
3.2832	29			63.7	200.0
				62.8	290.6
				62.5	381.8
				56.5	457.0
				49.8	503.9
				35.1	529.6
				21.5	537.0
				0.38	555.6
7.1652	29			63.6	200.7
				62.7	291.3
				61.9	379.2
				56.0	454.5
				49.4	501.4
				35.0	528.5
				21.4	534.8
				0.35	553.5
12.1165	29			64.0	204.1
				62.4	291.9
				61.5	378.9
				55.4	452.3
				49.1	501.1
				34.7	527.1
				21.2	534.8
				0.28	555.3

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	29	60.4	192.7	62.9	200.6
		60.3	282.0	62.3	291.6
		59.2	364.7	61.5	378.6
		54.2	442.6	55.4	451.9
		47.1	480.4	48.8	497.6
		33.8	513.8	34.7	527.0
		21.1	532.2	21.2	534.7
		0.28	555.0	0.28	555.3
34.5539	29			62.3	200.8
				61.8	291.3
				61.2	379.1
				54.6	448.3
				48.3	495.2
				34.4	525.8
				21.0	532.5
				0.21	554.2
60.6791	29			62.5	203.3
				61.6	292.7
				60.0	374.0
				53.8	444.0
				47.8	492.2
				34.0	522.6
				20.8	530.3
				0.14	553.0
100.6731	29	62.4	199.0	61.8	197.0
		61.6	288.2	61.0	285.4
		60.2	370.8	59.6	367.3
		54.6	445.6	54.2	441.9
		47.0	483.5	47.2	480.9
		33.8	513.8	33.7	512.6
		21.1	532.2	21.1	531.6
		0.28	552.0	0.28	551.8

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	29			61.4	202.2
				60.8	291.1
				59.5	373.3
				54.0	448.2
				47.5	491.9
				34.0	525.6
				20.7	533.3
				0.07	552.9
191.5211	29			60.8	196.0
				59.6	281.2
				58.9	365.2
				54.0	442.9
				48.6	498.0
				34.1	520.7
				20.9	529.4
				0.20	550.8
270.4168	29			59.9	191.2
				59.5	278.5
				58.4	360.0
				54.0	440.3
				47.8	487.0
				34.4	523.2
				20.9	527.2
				0.24	549.4
416.8107	29	58.4	186.4	59.1	198.7
		57.6	296.6	58.0	281.7
		56.2	346.3	57.0	361.8
		51.6	421.2	51.6	433.0
		45.3	462.1	46.2	483.6
		32.6	495.5	33.1	516.5
		20.4	514.1	20.1	522.4
		0.27	537.0	-0.05	546.4

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
0.0643	30	65.4	207.2	64.7	192.0
		64.2	300.0	63.2	281.7
		60.7	372.7	60.0	353.9
		52.7	429.3	52.0	408.5
		45.6	465.1	45.4	447.0
		33.0	501.6	33.3	487.6
		21.0	527.1	21.3	513.6
		0.29	570.0	0.69	557.1
3.2832	30			64.4	201.1
				63.4	293.0
				62.5	380.3
				56.1	453.1
				48.1	487.0
				34.5	519.6
				21.4	530.7
				0.38	557.3
7.1652	30			64.3	201.7
				63.4	293.6
				61.9	377.6
				55.7	450.4
				47.8	484.4
				34.2	517.2
				21.2	528.4
				0.35	555.1
12.1165	30			64.4	204.1
				63.2	294.9
				61.5	377.4
				55.1	448.4
				47.4	483.1
				34.0	516.0
				21.1	530.4
				0.28	557.0

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
20.3281	30	60.4	191.5	63.3	200.6
		59.6	278.3	62.4	291.4
		58.2	357.4	60.9	373.8
		53.1	432.4	54.7	444.9
		46.8	477.4	47.3	482.8
		33.6	510.7	33.9	515.9
		21.1	530.1	21.1	530.3
		0.28	555.0	0.28	557.0
34.5539	30			63.0	202.0
				61.7	290.6
				60.1	371.3
				53.9	441.3
				46.7	478.6
				33.7	514.8
				20.8	526.3
				0.21	556.4
60.6791	30			63.4	205.0
				61.6	291.8
				59.4	369.2
				53.1	436.9
				46.0	474.6
				33.2	510.6
				20.7	527.2
				0.14	552.7
100.6731	30	62.4	197.7	62.1	196.8
		61.6	287.6	61.1	285.3
		59.2	363.5	58.6	359.9
		53.9	438.5	53.6	436.1
		47.1	480.4	47.0	478.9
		33.8	513.8	33.7	512.6
		21.1	530.1	21.1	529.5
		0.28	555.0	0.28	554.6

Table III (Continued)

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)
130.2819	30			61.1	199.9
				60.6	289.4
				58.1	363.6
				53.0	438.5
				46.3	479.8
				33.1	511.0
				20.7	530.1
				0.07	551.9
191.5211	30			60.3	193.3
				59.8	281.7
				57.2	353.9
				52.7	431.6
				46.0	471.9
				33.5	512.0
				20.7	523.0
				0.20	550.3
270.4168	30			60.7	192.7
				59.9	279.9
				57.4	352.4
				52.4	426.8
				46.5	473.9
				33.3	506.7
				20.9	525.1
				0.27	549.7
416.8107	30	58.4	185.2	59.8	199.8
		57.0	266.0	58.0	281.3
		54.7	336.0	55.6	352.6
		50.50	411.1	50.6	423.5
		44.7	455.9	44.6	467.5
		32.4	492.5	32.4	505.7
		20.4	512.0	20.1	520.4
		0.27	537.0	-0.05	546.0

(1) Time After Lift-Off (days)	(2) Cell No.	(3) Uncorrected Current (ma)	(4) Uncorrected Voltage (mv)	(5) Corrected Current (ma)	(6) Corrected Voltage (mv)